

UNITED STATES OF AMERICA
DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

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NATIONAL INSTITUTE FOR OCCUPATIONAL
SAFETY AND HEALTH
ADVISORY BOARD ON RADIATION AND
WORKER HEALTH

+ + + + +

SUBCOMMITTEE FOR DOSE RECONSTRUCTION REVIEW

+ + + + +

THURSDAY, MARCH 12, 2009

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The meeting came to order at
9:30 a.m., in the Zurich Room of the
Cincinnati Airport Marriott Hotel, Hebron,
Kentucky, Mark Griffon, Chairman, presiding.

PRESENT:

MARK GRIFFON, Chairman
BRADLEY P. CLAWSON, Member
MICHAEL H. GIBSON, Member
WANDA I. MUNN, Member*

THEODORE M. KATZ, Acting Designated Federal
Official

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IDENTIFIED PARTICIPANTS:

NANCY ADAMS, NIOSH Contractor*
KATHY BEHLING, SC&A*
DOUG FARVER, SC&A
STUART HINNEFELD, NIOSH
EMILY HOWELL, HHS
ROY LLOYD, HHS*
JOHN MAURO, SC&A
SCOTT SIEBERT, NIOSH

*Participating via telephone

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1 P-R-O-C-E-E-D-I-N-G-S

2 (9:30 a.m.)

3 MR. KATZ: Good morning. This is
4 Ted Katz, the Acting DFO for the Advisory
5 Board of Radiation Worker Health. And this is
6 the Subcommittee on Dose Reconstruction
7 Review.

8 Welcome, folks on the phone. We
9 are going to start with roll call. Board
10 members in the room, starting with the Chair?

11 CHAIRMAN GRIFFON: This is Mark
12 Griffon, Chair of the Subcommittee on Dose
13 Reconstruction.

14 MEMBER CLAWSON: Brad Clawson,
15 Advisory Board member.

16 MEMBER GIBSON: Mike Gibson,
17 Advisory Board member.

18 MR. KATZ: And then on the
19 telephone, Wanda, do we have you?

20 Okay. Not yet. I believe Wanda
21 is intending to attend. And Dr. Poston let us
22 know yesterday that he wouldn't be available

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1 until this afternoon. So then --

2 CHAIRMAN GRIFFON: Is Bob Presley,
3 is he --

4 MR. KATZ: Bob, are you? Are you
5 on the line, Bob Presley?

6 Okay, then. For the NIOSH ORAU
7 team in the room?

8 MR. HINNEFELD: Stu Hinnefeld,
9 NIOSH Office Compensation Analysis Support.

10 MR. SIEBERT: And Scott Siebert,
11 the ORAU team.

12 MR. KATZ: And do we have any
13 NIOSH ORAU members on the line?

14 Okay. Then SC&A in the room?

15 DR. MAURO: John Mauro, SC&A.

16 MR. FARVER: Doug Farver, SC&A.

17 MR. KATZ: Any SC&A members on the
18 line?

19 MS. BEHLING: Kathy Behling, SC&A.

20 MR. KATZ: Welcome, Kathy.

21 MS. BEHLING: Thank you.

22 MR. KATZ: Okay. That covers.

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1 And then other federal employees? There are
2 none in the room. On the line?

3 MR. LLOYD: Roy Lloyd, HHS.

4 MR. KATZ: Welcome, Roy.

5 MR. LLOYD: Thank you.

6 MR. KATZ: Okay. That covers. No
7 federal contractors either?

8 CHAIRMAN GRIFFON: Who is Roy?

9 MR. KATZ: Roy Lloyd, HHS.

10 CHAIRMAN GRIFFON: Oh. Okay.

11 MR. KATZ: Okay. Then that covers
12 attendance. Any members of the public or
13 staff of congressional offices on the line?

14 Okay. Then we can get going.

15 Mark, it is all yours.

16 CHAIRMAN GRIFFON: All right.

17 Okay. We have a lot of stuff on the agenda
18 today, which I am sure we are not going to get
19 through everything. But we missed the meeting
20 in January, I believe. It was snowed out. So
21 we are back to make up on some of that work.

22 One of the first items -- well,

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1 let me just read a proposed agenda. I might
2 have even sent out earlier something of an
3 agenda, but the other might be slightly
4 modified.

5 For those on the phone, just to
6 let you know, if you have certain sections you
7 want to click off, the first thing I want to
8 do is this 11-set case selection. We have
9 some proposed cases in front of us. This is
10 really a Subcommittee item.

11 At the last meeting, the last
12 Board meeting, the Board communicated that we
13 could do the selection of the cases for this
14 round. And so we have a final set of cases
15 with all of the detailed information on it.
16 We are going to do that selection process in
17 a minute.

18 After that, we are going to go
19 into the sixth and seventh set of cases. And
20 there are some outstanding items on those. We
21 are close to closing, I think, on most items
22 on both of those sets of cases. It would be

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1 nice if we could close those out.

2 And then we have an eighth set of
3 cases. The last version of a matrix I have is
4 on December 8th, which has the latest. NIOSH
5 added some additional response into that
6 matrix. So this will be our first cut through
7 of the findings in the eighth set of cases.

8 After lunch -- and this one I
9 wanted to try to save for after lunch because
10 I think John Poston is going to be able to
11 join us at that point, and we would like his
12 input on the discussion -- I would like to get
13 into that first 100 cases letter.

14 We brought a letter back to the
15 Board. And Paul said it wasn't good enough.
16 No. Several people asked for more
17 information. Sort of up front I think we
18 wanted to have a better either executive
19 summary or, you know, bottom line kind of
20 bullet points. And I think that is what I
21 want to take up after lunch.

22 And just in thinking about that,

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1 people might consider how we are going to
2 format that because one of the reasons we left
3 it out, quite frankly, the first time was that
4 I'm not sure we could come to a consensus on
5 every item. So we didn't make a one single
6 bottom line conclusion.

7 But we may not have to do it in
8 that format. We may be able to -- you know,
9 several things were identified during this
10 review, including a listing of bullets of
11 conclusions that we feel strongly about in
12 that review.

13 So we will have that discussion.
14 And then depending on where we get, we will
15 continue on these. I don't think we will need
16 more on the agenda than that. That should be
17 done by 5:00 o'clock. I think anybody who has
18 to travel, has later flights, should be done
19 by 4:30 or 5:00 o'clock, I would think this
20 will take us up to.

21 So if there are no questions on
22 the agenda, we will start it with the 11-set

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1 case selection. I mean, I have gone through
2 a lot of these. My overall impression was
3 that other than these, I shied away from
4 selecting multiple Bethlehem Steels or
5 multiple General Steels. I think it was like
6 three of each of those. But a lot of the
7 other ones I thought were reasonable for
8 selection. I mean, let's just do it a page at
9 a time and go through like we always do. And
10 I think, Wanda, are you on the line?

11 Not yet. Okay.

12 MR. KATZ: Bob, have you joined
13 us?

14 Okay.

15 CHAIRMAN GRIFFON: All right.
16 Well, I will keep a tally. It's just the
17 three of us right now. On the first page, I
18 selected all of them.

19 MS. ADAMS: Do you want me to try
20 and call and see if they will get on the line?
21 It's Nancy.

22 MR. HINNEFELD: That's Nancy.

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1 MS. ADAMS: Do you want me to try
2 to call?

3 MR. KATZ: Nancy, that would be
4 great if you could give them a ring just to
5 check. It's early for Wanda. So I could
6 understand her --

7 CHAIRMAN GRIFFON: It is early,
8 yes.

9 MR. KATZ: -- not being on the
10 line.

11 MS. ADAMS: And then who else is
12 missing? Bob?

13 MR. KATZ: Bob Presley.

14 CHAIRMAN GRIFFON: Right. He may
15 not be planning on it.

16 MS. ADAMS: Okay. Well, maybe
17 I'll wait like 15 minutes or so before I call
18 Wanda.

19 CHAIRMAN GRIFFON: Okay. Don't
20 want to get her mad.

21 MR. KATZ: It's okay, Nancy,
22 because she has an answering machine-type

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1 hookup. So if she's not up, she won't pick it
2 up.

3 MS. ADAMS: Okay. Then I'll call.
4 All right.

5 MR. KATZ: Thanks.

6 CHAIRMAN GRIFFON: All right. So
7 do you want to pause or what? I don't think
8 we may that many other people on the phone if
9 you want to wait for them or no?

10 MR. KATZ: You don't need to.

11 CHAIRMAN GRIFFON: Okay. Anybody
12 have any opinions? I mean, I actually checked
13 every case on this page as being reasonable
14 for us to look at. Any dissenting view on
15 that?

16 MEMBER CLAWSON: No.

17 CHAIRMAN GRIFFON: All right.

18 Page 2? Page 2 I picked number 35, 37, 40,
19 and 42. The only ones I skipped were the
20 extra Bethlehem Steel cases.

21 MEMBER CLAWSON: That works.

22 CHAIRMAN GRIFFON: All right. The

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1 next page, I have number 46, 47, and 51 at
2 the bottom of the page. I skipped the Hanford
3 number 48 because it seemed like we had a
4 couple of skin cancer ones coming in there.
5 I didn't want to. All right.

6 MR. SIEBERT: Did you skip Rocky
7 Flats for a reason, 43?

8 CHAIRMAN GRIFFON: I skipped 43.
9 Well, yes. That's when I was realizing maybe
10 that's SEC. I don't think it's SEC anyway.
11 I mean, I can't imagine it's not SEC.

12 MR. SIEBERT: Right.

13 CHAIRMAN GRIFFON: Those other two
14 I didn't check the cancer on those, but let's
15 leave those on there for now.

16 Next page, I have 53, 56, 60, and
17 61, although I guess we could look at either
18 56 or '7 for General Steel. They are both
19 lung cancers. One is a little closer to the
20 50th percentile.

21 MEMBER CLAWSON: I picked the one

22 --

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1 CHAIRMAN GRIFFON: Fifty-seven?
2 Okay. Yes. Yes. I just saw that. So it's
3 53, 57, 60, and 61.

4 MEMBER GIBSON: Mark the page 56,
5 though. Based on the job title, you wouldn't
6 expect chainman to have that much of a --

7 CHAIRMAN GRIFFON: Yes. That is
8 --

9 MR. SIEBERT: It's chainman.

10 CHAIRMAN GRIFFON: Oh, chainman?
11 Yes.

12 MEMBER CLAWSON: Sorry about that.

13 CHAIRMAN GRIFFON: It's time to
14 put on my glasses. All right. So we'll stay
15 with that, 53, 57, 60 and 61.

16 Next page, I have 64, although I
17 want -- no, no. Sixty-four is probably okay.
18 Sixty-five, 67, 68, and 72. Really, just skip
19 the General Steel case.

20 Next page, I have all of them
21 checked. And the other thing I will say is
22 that there were several Savannah River cases

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1 in here and Hanford cases, and that is
2 something I might not have mentioned on my
3 afternoon agenda, the selection criteria.

4 I still think we have done quite a
5 few cases with Savannah River and Hanford, but
6 when we looked at -- if we really wanted to
7 stay with that two and a half percent, we were
8 still well below in the overall cases. So I
9 think we are okay with those.

10 We had a couple of best estimate
11 cases for Hanford and Savannah River, where we
12 had some pretty lengthy discussions in the
13 fifth set, I think it was. So I think it
14 might be good to revisit. I don't think it
15 hurts us to do several more of those. So all
16 six on that page.

17 And the last page was General
18 Steel. I skipped that last one. So I think
19 if my count is right, I had 27.

20 MEMBER CLAWSON: Yes.

21 CHAIRMAN GRIFFON: Twenty-seven,
22 yes. And we may lose a few, but at least that

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1 will give --

2 DR. MAURO: The General Steel now,
3 I know that they had been a two-phased
4 approach. It was the early General Steel.
5 And then this is in light of the matter that
6 you --

7 CHAIRMAN GRIFFON: I don't think
8 you are loud enough.

9 DR. MAURO: Yes. Correct me if I
10 am wrong. On General Steel, there may have
11 been some earlier cases that used an earlier
12 version of the site profile. And then perhaps
13 I do believe the site profile was revised.
14 There may have been some later cases. I'm not
15 sure.

16 I don't know if anyone on the line
17 or here in the room recalls there may be an
18 early date and late date that might make a
19 difference. And it's the later date that --
20 well, I don't know. I would guess you would
21 want to look at both, especially if they were
22 denied.

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1 CHAIRMAN GRIFFON: These are all
2 done either 7-26-07 or 9-20-07 or the dates on
3 all.

4 DR. MAURO: Well, they were close.

5 CHAIRMAN GRIFFON: Is that your
6 completion date, that --

7 MR. HINNEFELD: There is a date
8 approved or something.

9 CHAIRMAN GRIFFON: Date approved.
10 Yes, approval date.

11 MR. HINNEFELD: That is
12 essentially the completion date because that
13 is the date that the health physics reviewer
14 at OCAS says okay to the --

15 CHAIRMAN GRIFFON: So they are all
16 done 7 to 9 '07 there.

17 DR. MAURO: They are probably all
18 the same. Okay.

19 MR. HINNEFELD: Yes. I think they
20 are probably old set. I am not 100 percent
21 sure there has been an amendment to the site
22 profile.

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1 DR. MAURO: Well, I know when the
2 film badge data came in, it had a sweeping
3 effect on it, but that went more toward
4 validating.

5 MR. HINNEFELD: Validating.

6 DR. MAURO: Yes.

7 MR. HINNEFELD: I think what we
8 considered the film badge data to do was to
9 validate that the model we had selected was
10 bounding.

11 DR. MAURO: Yes, you are right.

12 MR. HINNEFELD: And I don't think
13 we --

14 DR. MAURO: There was no need to
15 revise.

16 MR. HINNEFELD: And since it would
17 be a downward adjustment, we tend not to put
18 those very high.

19 DR. MAURO: Never mind. You're
20 right.

21 MS. BEHLING: Excuse me. This is
22 Kathy. Just to add to John's comment, I think

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1 with the General Steel, there were maybe two
2 selected, but the first one was pulled for
3 some reason. I only believe we have actually
4 evaluated one General Steel.

5 DR. MAURO: Yes. Kathy, the first
6 one that was pulled turned out to be Granite
7 City. It was one of those cases.

8 CHAIRMAN GRIFFON: Right.

9 MS. BEHLING: Okay.

10 DR. MAURO: So you are right. We
11 do have only right now one General Steel. And
12 this would be the second one.

13 CHAIRMAN GRIFFON: This would be
14 the second one.

15 DR. MAURO: Okay.

16 MS. BEHLING: Okay. Very good.

17 CHAIRMAN GRIFFON: Okay. So I
18 guess the process from here is I will get
19 these to Paul, but this is a Subcommittee
20 final decision here. Yes, yes.

21 MR. HINNEFELD: I believe the
22 Committee authorized the Subcommittee to make

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1 the final decision. So I think yes, you
2 should notify Paul, but I will independently
3 send this list, the selected list, to Jeff
4 Kotsch, ask him -- he's usually pretty prompt
5 about this -- to look for what he calls
6 post-closure activities.

7 I will take another look. We will
8 take another look on our site, make sure
9 something hasn't reopened as well. Jeff will
10 probably tell us that anyway. And then
11 prepare the list. Let everybody know how many
12 it is. And I'll send the list to John.

13 DR. MAURO: Terrific.

14 MR. HINNEFELD: It will contain,
15 that list will contain, NIOSH tracking numbers
16 so that John's folks can find the case in the
17 office and be able to --

18 DR. MAURO: Okay. And --

19 MR. KATZ: Is it possible with
20 that follow-up work that something might drop
21 out, in other words?

22 MR. HINNEFELD: Oh, yes. Yes.

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1 Some of these may drop off.

2 CHAIRMAN GRIFFON: Some of these
3 may drop off, right.

4 MR. KATZ: So if they do, do you
5 want to just establish now while you have the
6 working group in session that for the ones
7 where you had a duplicate at the same
8 facility, that you just swap out, then, as
9 opposed to losing --

10 CHAIRMAN GRIFFON: If those drop
11 out --

12 MR. HINNEFELD: Would you like me,
13 then, to select the next highest? I mean, if
14 you give me a decision criteria, you can make
15 it simple and say, select the next highest
16 POC. That is a simple one. There are others,
17 though. There may be some that are very
18 interesting and some that you want to check
19 that might be worthwhile.

20 CHAIRMAN GRIFFON: I mean, I think
21 for the Bethlehem Steel, if that one happens
22 to drop out, we could use on page 2 if

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1 everyone agrees -- number 38 could be
2 replaced.

3 MR. HINNEFELD: Backup.

4 CHAIRMAN GRIFFON: Yes, backup.

5 So 38 as a backup Bethlehem Steel case, in
6 other words, not of another --

7 MR. HINNEFELD: Same with the --

8 CHAIRMAN GRIFFON: And then for
9 Granite City, yes, or GSI, I mean, yes. Let's
10 not go there. GSI. You started me on that.
11 GSI. I mean, I could get -- either one of
12 those is fine with me, the lung or the stomach
13 case. Anybody have a preference on those two
14 cases?

15

16 MR. GIBSON: Do you want to do that
17 chairman?

18 (Laughter.)

19 CHAIRMAN GRIFFON: I read the same thing,
20 Mike. Let's have 56 as a backup, then, as far as --

21 DR. MAURO: Do you have the lung?

22 Is the lung going to be picked?

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1 CHAIRMAN GRIFFON: Yes.

2 DR. MAURO: Good.

3 CHAIRMAN GRIFFON: Yes. So those
4 two will be backups if those, Bethlehem or
5 GSI, happen to fall off. Right? Otherwise,
6 I mean, if the Rocky things fall off, we just
7 have a smaller number, for instance.

8 MR. HINNEFELD: Yes.

9 CHAIRMAN GRIFFON: The only other
10 thing I would ask, Stu, is I think, I guess,
11 if you get a final listing, if you will cc me
12 and Paul or something because Paul has got to
13 make the Board assignments for who is going to
14 review what cases.

15 MR. HINNEFELD: Okay.

16 CHAIRMAN GRIFFON: So that would
17 be the only other thing.

18 MEMBER MUNN: Good morning, all of
19 you.

20 MR. KATZ: Good morning. Welcome,
21 Wanda.

22 MEMBER MUNN: It's a good thing

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1 Nancy called. So now I am awake.

2 (Laughter.)

3 I am upright. And my computer is
4 now glowing anyway. And I have no idea where
5 we are.

6 CHAIRMAN GRIFFON: Well, we just
7 finished the first agenda item.

8 MEMBER MUNN: How wonderful.

9 CHAIRMAN GRIFFON: It went
10 swimmingly.

11 MEMBER MUNN: I have the agenda as
12 well. Okay.

13 MS. ADAMS: Sorry to wake you,
14 Wanda.

15 MEMBER MUNN: Oh, that's quite all
16 right. I am glad you did, Nancy. I have no
17 idea how it -- well, I'm going to blame it on
18 anesthesia.

19 CHAIRMAN GRIFFON: Wanda, the
20 first item was the 11-set case selection. And
21 I think you should have gotten an e-mail from
22 Stu in the last couple of days, wasn't it,

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1 last several?

2 MR. HINNEFELD: It's been within
3 the past week or two that --

4 MEMBER MUNN: I can't blame it on
5 anesthesia. No kidding.

6 MR. HINNEFELD: I didn't do it
7 this week. I know that.

8 MEMBER MUNN: Let's see what I
9 have here.

10 MR. HINNEFELD: I did it probably
11 last --

12 CHAIRMAN GRIFFON: Last week, I
13 think, maybe.

14 MR. HINNEFELD: Probably, yes.

15 CHAIRMAN GRIFFON: Yes. Anyway,
16 we went through those. There were about,
17 what, 40 total cases on there, Stu, or a
18 little less?

19 MR. HINNEFELD: Yes, something
20 like that. I don't know the --

21 CHAIRMAN GRIFFON: Yes. And we
22 ended up with selecting 27 of those, at least

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1 with the understanding that Stu has got to
2 bring those back to DOL and make sure that we
3 can review all of those, that they haven't
4 held up for something else.

5 MEMBER MUNN: Right.

6 CHAIRMAN GRIFFON: But I think we
7 have 27 right now. They're all between 45 and
8 50 percentile. If you recall, that's the ones
9 that --

10 MEMBER MUNN: Yes.

11 CHAIRMAN GRIFFON: So let's see.
12 If you find a list, maybe at a break I can go
13 through which cases you selected in.

14 MEMBER MUNN: That's fine.

15 CHAIRMAN GRIFFON: Yes. Okay.

16 MR. KATZ: And just to summarize
17 for her as to how selection was done is
18 basically we stuck with just one case with
19 Bethlehem Steel, where there were numerous,
20 and one case of GSI, where there were
21 numerous.

22 CHAIRMAN GRIFFON: And almost

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1 every other case.

2 MR. KATZ: Almost everything else.

3 CHAIRMAN GRIFFON: We skipped a
4 few other ones but almost every other one,
5 yes. Yes. They all look pretty reasonable
6 for review.

7 MEMBER MUNN: Okay.

8 CHAIRMAN GRIFFON: But GSI, yes.
9 GSI had like four cases there. And they all
10 used the same site-wide models. So we only
11 selected one of those. And the same with
12 Bethlehem Steel had three, I believe. And we
13 used one of those.

14 MEMBER MUNN: Okay.

15 CHAIRMAN GRIFFON: And then yes,
16 otherwise pretty much across the board. Yes.

17 All right. Now we are going to
18 move on to the sixth set. And, Wanda, just to
19 give you a brief of where we are going today
20 while you are making your coffee --

21 MEMBER MUNN: Yes. Right. This
22 is not going to happen.

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1 CHAIRMAN GRIFFON: Yes. The sixth
2 and seventh set we're going to discuss this
3 morning. And if you recall, there are not
4 that many outstanding items left on those. I
5 believe if you check on your email, I sent
6 those out.

7 I think I have one 29 on the date
8 or one 27. It's right at the end of January.
9 It was before that last snowed-out meeting
10 that I sent a revision of both those matrices,
11 the sixth cases and the seven set of cases.

12 And, for ease of review, I believe
13 -- and we will have to check this as we walk
14 through them -- in the final column, if there
15 was still an outstanding item, I tried to
16 leave it highlighted in yellow so we could all
17 quickly scan through and find it. So that's
18 what we are going to do the rest of the
19 morning.

20 We also have an eighth set of
21 cases that NIOSH gave us additional responses
22 on.

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1 MR. HINNEFELD: When did you send
2 the matrix you are talking about?

3 CHAIRMAN GRIFFON: You didn't get
4 it?

5 MR. HINNEFELD: I don't know. I
6 don't know.

7 MR. SIEBERT: We look sufficiently
8 confused over here.

9 CHAIRMAN GRIFFON: Yes. Sorry.
10 1/27/09. And I would have sent them probably
11 to -- I think I just sent them to John and Stu
12 and then assumed that you got -- you know, you
13 would --

14 MS. BEHLING: Is it possible for
15 someone to forward that to me? This is Kathy.

16 MR. FARVER: Yes. I am
17 comfortable with Kathy.

18 MR. KATZ: It is coming your way,
19 Kathy.

20 CHAIRMAN GRIFFON: I have my old
21 laptop. I am not able to get on mine here.

22 MR. HINNEFELD: If you are going

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1 to e-mail it, how about email it for me, too?

2 MR. FARVER: I'm nice. I'll

3 e-mail it to --

4 MS. BEHLING: Thank you.

5 CHAIRMAN GRIFFON: Okay. And then
6 while we are looking for these documents,
7 Wanda, then as we get there, we are going to
8 go into the eighth set. And that will be our
9 first pass-through on the eighth set of cases.

10 And then in the afternoon, after
11 lunch, I think this is one of the more
12 critical items, the first 100 cases letter
13 report. If you recall, we were asked to
14 revisit that.

15 MEMBER MUNN: Yes.

16 CHAIRMAN GRIFFON: And John Poston
17 can't be on until after lunch. So I kind of
18 wanted to do that item when John was able to
19 join us. So we are going to start that right
20 after lunch.

21 And then also we wanted to have a
22 discussion of the selection criteria,

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1 whether we want to modify the selection
2 criteria at all, case selection criteria.

3 So that is pretty much the agenda,
4 just to give you a sense of where we are
5 going.

6 MEMBER MUNN: I have to find
7 something here.

8 CHAIRMAN GRIFFON: Okay. I know
9 it's a little early, but let's take a
10 five-minute pause. You can just mute the
11 phones maybe.

12 Let's get these documents e-mailed
13 and stuff, make sure everybody has them in
14 front of them, no sense moving on until we
15 have the documents.

16 (Whereupon, the above-entitled
17 matter went off the record at 9:56
18 a.m. and resumed at 10:01 a.m.)

19 MR. KATZ: Tea time is over. We
20 are starting up again. Do we have you, Wanda?

21 MEMBER MUNN: You have me, but
22 that's about all you have. Something has gone

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1 wrong. Mr. Gates and I were arguing this
2 morning.

3 MR. KATZ: Your voice is cutting
4 out, Wanda.

5 MEMBER MUNN: That's because I
6 have my head in something other than the
7 speaker. I'm having a hard time even finding
8 my file. Mr. Gates has done something to me.

9 CHAIRMAN GRIFFON: So do you have
10 the electronic file, Wanda, or do you want us
11 to wait a minute or --

12 MEMBER MUNN: No. Don't wait for
13 me because the file that should come up at my
14 bidding is not coming up at all.

15 CHAIRMAN GRIFFON: All right.
16 Well, we'll plunge ahead. This is old stuff
17 from the sixth and seventh set. So you have
18 certainly heard these before. So we will plow
19 ahead. And hopefully you will get new stuff
20 in front of you soon.

21 MEMBER MUNN: Keep going.

22 CHAIRMAN GRIFFON: All right. All

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1 right. So what I am going to do is go through
2 the sixth set. Right now I'm going to just
3 scan down on the electronic version, but
4 please stop me if I miss something that is
5 still outstanding because I am not completely
6 100 percent confident that my little yellow
7 highlighting system is flawless. So please
8 stop me along the way if we have something
9 that is not resolved that wasn't in yellow
10 highlight.

11 The first one I see, though, is
12 finding 104.7. And it's there's an action,
13 NIOSH to provide the basis for the
14 concentration of transuranics used for this
15 site. So was this specific question about the
16 -- it's sort of a --

17 DR. MAURO: Recycled uranium.

18 CHAIRMAN GRIFFON: Yes, recycled
19 uranium.

20 MR. HINNEFELD: Yes. I actually
21 know a little about this question. It won't
22 be necessarily the case on all of these. We

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1 are, in fact, trying to decide how to deal
2 with this issue of publishing transuranic
3 contents. There is an effort, which is what
4 we said.

5 And it is still not approved.
6 There are some questions about is this really
7 the applicable thing, is this really what we
8 want to do.

9 So that is in the OCAS shop. That
10 is not in ORAU. That is in the OCAS shop.
11 And I just have to get the right couple of
12 guys to decide, is this what we're going to do
13 or not? If we're not going to do this, then
14 where are we going to write what we're doing
15 and showing identification for these things
16 that we have selected?

17 CHAIRMAN GRIFFON: So is it fair
18 to say there is continued action or not?

19 MR. HINNEFELD: We still owe you
20 something, yes.

21 CHAIRMAN GRIFFON: Okay.

22 MR. HINNEFELD: I will work on

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1 that when I get back in the office.

2 CHAIRMAN GRIFFON: Okay. Just
3 bear with me. I'm trying to update this live
4 so I can then forward a copy right after this
5 meeting and we don't fall into that trap
6 again.

7 The next one I show is 107.4.
8 Doug, please stop me, too, if you find
9 something in your notes. 107.4 says NIOSH
10 agreed to provide additional analysis
11 information -- that's my note -- analysis on
12 this.

13 And this looks like a Hanford
14 case?

15 MR. HINNEFELD: Savannah River.

16 CHAIRMAN GRIFFON: Oh, I'm sorry.
17 Savannah River, yes.

18 MR. HINNEFELD: Yes.

19 CHAIRMAN GRIFFON: Wrong number
20 scheme.

21 MR. HINNEFELD: The finding
22 related to whether the chronic assumption,

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1 chronic exposure assumption, is truly bounding
2 in this case. And we have generally used
3 chronic exposure scenarios for intermittent,
4 a bioassay where you have got some positives
5 and you can feel like a chronic exposure
6 generally bounded. But there was an analysis
7 done by SC&A that apparently called that
8 into question and we have not provided
9 addition. So this is on the list.

10 CHAIRMAN GRIFFON: It is still
11 outstanding?

12 MR. HINNEFELD: Yes.

13 CHAIRMAN GRIFFON: Okay. The
14 interesting thing on this, I mean, I want to
15 understand this because on 3/25, we said that
16 it would have no effect on the case. And it
17 looks like we are still continuing to plug
18 away on it.

19 MR. HINNEFELD: I think, yes, I
20 mean, if we can close on this case, that would
21 be one thing to do. But the question now
22 would remain, even if this case -- I guess

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1 that means because of the initial analysis
2 with maybe the higher internal intake still
3 didn't change the compensability. I guess
4 that's what that means.

5 CHAIRMAN GRIFFON: Yes. I think
6 that is what that means.

7 MR. HINNEFELD: But there is the
8 open general question --

9 CHAIRMAN GRIFFON: Of how --

10 MR. HINNEFELD: -- since we use
11 this technique a lot --

12 CHAIRMAN GRIFFON: A whole lot.
13 Right, right, right. So let's keep it --

14 MR. HINNEFELD: -- are we really
15 confident that --

16 CHAIRMAN GRIFFON: This is more in
17 the general --

18 MR. HINNEFELD: I think that that
19 is probably why we --

20 CHAIRMAN GRIFFON: Yes, I think we
21 concluded, you're right, that it didn't affect
22 the case either way.

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1 MR. HINNEFELD: If I were you,
2 that is what I would be thinking.

3 CHAIRMAN GRIFFON: Right, even
4 with --

5 MR. HINNEFELD: I am going to say
6 --

7 CHAIRMAN GRIFFON: Oh, no, no, no.
8 I was just trying to understand. I think what
9 SC&A concluded was that, even if they used
10 their approach, it still wouldn't have --

11 MR. HINNEFELD: Yes. It wouldn't
12 have --

13 CHAIRMAN GRIFFON: -- changed the
14 outcome. Right, right, right. We want to
15 know why.

16 MR. FARVER: I believe this is
17 going to come down to one of these
18 professional judgment calls.

19 MR. HINNEFELD: Okay.

20 CHAIRMAN GRIFFON: Yes, yes, yes.

21 MR. FARVER: I thought you had
22 provided this.

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1 MR. HINNEFELD: Okay. There is a
2 fairly lengthy response. We have gone back on
3 it.

4 CHAIRMAN GRIFFON: Right.

5 MR. SIEBERT: I am kind of with
6 Doug. I think it ends up being professional
7 judgment as to --

8 MR. FARVER: And I'm not sure that
9 either party can tell you which is correct.
10 So how do you decide? I guess that is kind of
11 where we left it, is how do you make that
12 determination?

13 DR. MAURO: For my edification, it
14 was my understanding that --

15 CHAIRMAN GRIFFON: Yes.

16 DR. MAURO: -- when you are
17 confronted with a series of bioassay results,
18 a judgment, you try to fit the data or you
19 make an assumption that what is the chronic
20 intake or you make an assumption if you have
21 other information that it might have been a
22 single intake, halfway between the two at the

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1 time this bioassay was taken and the previous
2 bioassay.

3 So, in other words, the last time
4 I was involved in this kind of question, it
5 was my understanding that assuming chronic
6 uniform is your standard practice, there are
7 times when you take exception to that. And
8 there's usually a rationale.

9 And I guess that in this
10 particular case, whichever approach you took
11 was something that we weren't expecting to
12 see. I think we were expecting to see either
13 one, chronic or --

14 MR. HINNEFELD: I think the
15 comment was that a periodic acute would be
16 higher than what was --

17 DR. MAURO: In this case.

18 MR. HINNEFELD: In this case.

19 DR. MAURO: This is a case, just
20 for anybody who is not with the reading here,
21 this is a firsthand annual bioassay. So
22 someone in their -- they fit into a job

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1 category that is generally -- there is
2 potential for exposure that is not considered
3 one of the highly exposed.

4 MR. FARVER: I don't know.

5 DR. MAURO: So an annual bioassay

6 --

7 MR. FARVER: I don't know if that
8 is true or not. A security guard can go
9 anywhere at any time.

10 MR. HINNEFELD: Okay. But they
11 would not be working directly with the
12 material, like some package or --

13 MR. FARVER: You know, they might
14 be standing next to it.

15 MR. HINNEFELD: Well, they could.
16 They could. Our general approach is that what
17 we would consider security or exposed, we
18 wouldn't consider like, for instance, chemical
19 operator at Fernald or something like that.

20 MR. FARVER: No. And that depends
21 on the site.

22 MR. HINNEFELD: There is off-site

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1 dependence on it. That's true. But that is
2 only partly relevant. If a person had annual
3 bioassay, which is another reason that that
4 the site felt that they were not heavily
5 exposed --

6 MR. FARVER: And I believe what it
7 came down to is when you set the midpoint or
8 the intake --

9 MR. HINNEFELD: And you could
10 fairly choose with an annual bioassay and then
11 there were no incidents or -- as I recall,
12 there were no incidents or follow-ups.

13 MR. SIEBERT: There was nothing
14 indicating --

15 MR. HINNEFELD: There was nothing
16 indicating exposure.

17 MR. SIEBERT: Correct, specific,
18 yes.

19 MR. HINNEFELD: So it was just the
20 annual bioassay.

21 DR. MAURO: That basic philosophy
22 or strategy is reasonable. That is, let the

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1 occupation and its exposure history speak to
2 the analyst. And then a judgment is made by
3 the analyst and puts down in his report the
4 rationale for picking whether it is going to
5 be episodic intake or chronic.

6 MR. HINNEFELD: Right.

7 DR. MAURO: I don't know if this
8 is a generic issue. I think that is agreed
9 that that is the reasonable way to come at the
10 problem. Now, if it turns out, though, that
11 when that judgment is made, it makes a
12 substantive difference to this particular
13 case, well, then we have something that is of
14 importance.

15 MR. HINNEFELD: Yes.

16 DR. MAURO: Now, you are saying
17 that it really didn't make a substantive
18 difference. What I am saying is I guess
19 leaving it open-ended to a degree to allow the
20 analysts to use judgment, as opposed to some,
21 let's say, strict hard and fast rule, you
22 shall always use chronic, something along

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1 those lines.

2 So I guess my sense is that it
3 makes sense to leave the analysts with a
4 degree of discretion as long as when he
5 exercises that discretion, he documents it.

6 CHAIRMAN GRIFFON: He documents
7 it. I think that's been one of our
8 frustrations, yes.

9 DR. MAURO: And also demonstrate
10 that by going the other route wouldn't flip
11 the conclusion. I think it is important to
12 recognize how important that discretion is.

13 Now, in this case, what I am
14 hearing is that it really wouldn't change
15 anything whether you went from chronic to
16 acute or not. Is that what --

17 MR. FARVER: Correct.

18 DR. MAURO: Yes.

19 MEMBER CLAWSON: You know, I've
20 got kind of a write-up on this. I think it
21 was Doug's response that said exactly what you
22 guys are, stand by our initial finding. We

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1 recognize that in the event of the assumption
2 uranium dose or triple chance in the total
3 dose is small, we would not affect the outcome
4 of this case. However, we urge NIOSH to use
5 caution when assuming chronic intake over the
6 employment period. Consider the EE job
7 function, if possible, as a single or multiple
8 acute intake.

9 That is what you sent back on that
10 one. And this is basically what we are
11 saying. We have got to have an avenue to be
12 able to make this judgment, also so that we
13 see in the case, don't we?

14 CHAIRMAN GRIFFON: Yes, which does
15 make a little sense with the security guard
16 function if you would expect it is probably
17 more likely that --

18 MR. HINNEFELD: Episodic.

19 CHAIRMAN GRIFFON: Episodic is
20 more likely.

21 MR. HINNEFELD: It is more likely.

22 CHAIRMAN GRIFFON: You could have

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1 walked into something at one time or a couple
2 of times or whatever, --

3 MR. HINNEFELD: Yes, yes.

4 CHAIRMAN GRIFFON: -- as opposed
5 to the routine steady chronic, yes. So I
6 guess that was your point, Doug.

7 MR. FARVER: Yes. How do you make
8 that determination --

9 CHAIRMAN GRIFFON: Right.

10 MR. FARVER: -- between chronic or
11 acute, especially when you have a job position
12 as this, where he is in and out of different
13 facilities.

14 CHAIRMAN GRIFFON: Right.

15 MR. SIEBERT: If I remember right,
16 this one was where the samples that he had to
17 base this on were positive and slightly
18 increasing. I think that was part of the
19 thought process that -- well, if they were
20 slightly increasing over time, chronic could
21 be fitting, although I can see both sides of
22 it. It is usually an internal dosimetry

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1 thing. I can see both sides of it, yes.

2 MR. FARVER: Yes, but how do you
3 make that determination?

4 MR. HINNEFELD: Well, we will
5 check and see. I will have to check and see
6 what kind of guidance is available or what
7 kind of guidance might be possible even.

8 DR. MAURO: I think the only time
9 we really had a strong disagreement in a
10 situation like this is when you assume the
11 intake occurred the day before the bioassay
12 occurred.

13 MR. HINNEFELD: Yes.

14 DR. MAURO: And unless you knew
15 that, that really was the case --

16 MR. HINNEFELD: Right.

17 DR. MAURO: -- because we have
18 seen those. That would tend to minimize the
19 burden of the work. So in a case like this,
20 where that judgment has to be made, you know,
21 I guess I feel as if as long as it is
22 explained, it sounds like you went with

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1 chronic, but an argument could be made, well,
2 you know, perhaps acute would be better.

3 In this particular case, it really
4 didn't change anything.

5 MEMBER CLAWSON: Well, security
6 guards are an interesting one because each one
7 of the sites is going to be a little bit
8 different. I know in our case, a lot of times
9 when we have had an issue, a problem that has
10 arisen, we have left. And they check us for
11 it, but they actually position the guards.

12 In one our instances, we forgot to
13 involve them in the bioassay program. All of
14 us were checked, but none of them were. And
15 they were just outside the door because they
16 had controlled access.

17 So, you know, each one of these
18 has their own little nuance in what is going
19 to be --

20 DR. MAURO: Well, in your case,
21 would you say your security guard would likely
22 represent a chronic exposure situation because

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1 of the nature of his job, as opposed to acute?

2 MEMBER CLAWSON: That one would
3 have been chronic or acute, I guess. They
4 come in and out. And a lot of times they have
5 to come into situations where we have to leave
6 something unattended --

7 DR. MAURO: Okay.

8 MEMBER CLAWSON: -- and back and
9 forth, each one. That is why I am saying,
10 especially with a security guard, that we
11 tried to do these by job categories. But a
12 lot of them come into things that were going
13 out.

14 MR. SIEBERT: And another thing
15 with this one is when we looked at the acute
16 numbers, which, you know, we looked at Doug's
17 numbers, they are generally three to five
18 times higher than what we used as the largest
19 calculated uranium intakes that have ever been
20 at the site.

21 So that is also kind of another
22 indicator that your security guard problem

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1 isn't the guy who got three or four times
2 higher than the documented largest intake at
3 the site, --

4 CHAIRMAN GRIFFON: Right, right,
5 right.

6 MR. SIEBERT: -- although that's
7 another thing that could be documented in the
8 --

9 CHAIRMAN GRIFFON: I think that's
10 part of the problem is the documentation.

11 DR. MAURO: You've got to tell the
12 story.

13 CHAIRMAN GRIFFON: Yes, yes, yes.

14 DR. MAURO: That's always a help.

15 CHAIRMAN GRIFFON: Yes, yes.

16 MR. FARVER: We did respond.

17 CHAIRMAN GRIFFON: Right. Okay.

18 MR. FARVER: I'll turn it back to
19 you so you can just read it.

20 MR. HINNEFELD: Oh, we're done
21 talking about it.

22 MR. FARVER: Basically NIOSH did

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1 send a response. And they went, and they did
2 work different scenarios for the full
3 employment period, for acute intakes. And
4 they present a table of their results.

5 And you can see from the table the
6 doses are all over the place. It could be
7 anything from 19.6 rem to 150 rem.

8 DR. MAURO: But even the high-end
9 one doesn't flip it?

10 MR. FARVER: Let's see what they
11 say. It changes the POC from like 35 to 38.
12 It's a matter of process.

13 DR. MAURO: Yes, process.

14 CHAIRMAN GRIFFON: But I am not
15 sure that we have anything more to do on the
16 general. I mean, we have made our comments on
17 this, right, that we believe that the how, the
18 selection process should be better documented
19 or explained.

20 And I don't know to what extent it
21 is in any TIB, but I think I agree with John
22 that it shouldn't be prescriptive. But, you

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1 know, is there some guideline?

2 This goes back to my other
3 question, too, of the site-specific guideline
4 that they used at the time. I know Savannah
5 River has some site guides. And if that was
6 included in the case file, you know, that may
7 or may not --

8 MR. SIEBERT: That's not a site
9 guide thing, but I see what you are saying.

10 CHAIRMAN GRIFFON: Yes, yes, yes.
11 But I think I agree with John. We could
12 probably try to close this finding and just --

13 MR. HINNEFELD: Well, I will just
14 for my own curiosity and for edification,
15 future meetings, try to figure out if there is
16 guidance out there and what kind of thought
17 process goes into it. I mean, did we think
18 all of this ahead of time or sometimes paint
19 this stuff after the fact.

20 DR. MAURO: When we have a
21 circumstance like this, where we agree that
22 the issue is resolved as applied to this

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1 particular case but we also agree around the
2 table that there will be a benefit from a more
3 thorough development of the rationale on these
4 kinds of decisions, how does that come home to
5 roost, so to speak, that somehow we make sure
6 that, in fact, does happen?

7 You know, this is one of those we
8 can all agree around the table, yes, it is a
9 good idea, I think we should do that, but then
10 later on is there a way in which feedback, for
11 example -- yes, we have implemented that and
12 this is the way in which we have done it.

13 We have made it a part of an OTIB.
14 We have maybe supplemented one of your
15 internal dosimetry OTIBs that we'll talk
16 about. I know 53, whichever there might --

17 MR. SIEBERT: Sixty.

18 DR. MAURO: Yes. And that doesn't
19 necessarily have to be done right away, but
20 perhaps the next go-around there is a home for
21 this kind of language. And that would be at
22 least a way that we could all agree that yes,

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1 we have found a vehicle to sort of memorialize
2 this agreement.

3 MR. FARVER: Is there any document
4 on how you determine between a chronic or
5 multiple acutes?

6 MR. HINNEFELD: Well, the logical
7 place for it would be in the internal --

8 CHAIRMAN GRIFFON: Internal, yes.

9 MR. HINNEFELD: -- TIB 60, which
10 is --

11 MR. FARVER: I don't remember
12 seeing something like that.

13 MR. SIEBERT: I believe we're
14 updating it at the moment.

15 MR. HINNEFELD: There you go.

16 MR. SIEBERT: I have a feeling Liz
17 suddenly at her desk went --

18 DR. MAURO: Not only that. I
19 think maybe Wanda knows what is coming. It is
20 heading over to transfer to TIB 60. But that
21 would be the logical thing to do.

22 CHAIRMAN GRIFFON: But I do agree

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1 with John that we don't want to lose this.

2 DR. MAURO: We don't want to lose
3 it.

4 CHAIRMAN GRIFFON: This really is
5 the age-old question here.

6 MR. HINNEFELD: Well, I can report
7 back to you this afternoon, after I find
8 something out, what's in the system --

9 CHAIRMAN GRIFFON: Okay.

10 MR. HINNEFELD: -- what we think
11 is an avenue to help out here if there is an
12 avenue that can help out. It sounds like
13 there is one to me.

14 And so if there is an avenue, we
15 can find out and what kind of avenue, what is
16 best for that, because sitting here today, it
17 seemed like OTIB 60 would be that may not --
18 you know, I don't want to say decide today
19 that is how it is going to happen. You know,
20 there are a lot more people a lot smarter than
21 me about what goes on in this process.

22 MEMBER MUNN: Stu, I can barely

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1 hear you.

2 MR. HINNEFELD: I am sorry. I was
3 sitting back and mumbling. I will try to talk
4 into the microphone.

5 MEMBER MUNN: No. That is all
6 right. My line is not very loud, and I don't
7 know whether it has something to do with my
8 specific connection or whether it has
9 something to do with the equipment that you
10 have there.

11 I am hearing you folks but not as
12 clearly as I would like, clearly not with the
13 volume that I would like. I don't know if it
14 is possible to do anything there.

15 MR. HINNEFELD: Can we just blame
16 that on the anesthesia?

17 MEMBER MUNN: I would like to
18 blame it on the anesthesia, but,
19 unfortunately, I was on yesterday and didn't
20 see a problem.

21 MR. KATZ: Nancy, can you hear us
22 well?

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1 MS. ADAMS: Yes.

2 MR. KATZ: Aha.

3 MEMBER MUNN: Perhaps it's just my
4 connection.

5 MS. ADAMS: Yesterday in and out.
6 There was some in and out. But today I can
7 hear you fine.

8 MEMBER MUNN: Well, it is
9 individual lines, I guess, Nancy.

10 CHAIRMAN GRIFFON: We will try to
11 make sure we are all near the microphones,
12 too. That is always a problem.

13 MEMBER MUNN: I am particularly
14 sensitive since I heard John say my name. And
15 I think it had something to do with another
16 work group or something.

17 CHAIRMAN GRIFFON: Not to worry,
18 Wanda. It was nothing. It was just assigning
19 more work to the procedures work group.

20 MEMBER MUNN: But this is not the
21 first time that this kind of issue has come up
22 before us. And it might be wise for us to

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1 consider. I shudder to say this, but it would
2 be a relatively small document.

3 A separate matrix that had existed
4 on only items of this kind that have been
5 closed in terms of technical issue but still
6 have some potential administrative issues that
7 we wanted to track we could -- we have a few
8 of those, I think, previous matrices, do we
9 not?

10 CHAIRMAN GRIFFON: On this one, I
11 think I am going to let Stu do what he
12 indicated, which is to look back and see the
13 process because if it is, in fact, going to be
14 addressed in the internal dose procedure, you
15 know, in other words, investigate to see if
16 there are any procedures or documents that
17 currently have the NIOSH approach outlined.
18 And if that is the case, you can tell us that.
19 And if they are being revised, then we can
20 push it over to the procedures review
21 committee. That way we won't lose the general
22 sort of concern.

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1 I think for this case, we have
2 kind of closed it out. But I have left a
3 little highlighted thing, saying NIOSH will
4 investigate, you know, general guidelines,
5 what they have in terms of general guidelines
6 for this kind of instance.

7 MEMBER MUNN: It's going to be --
8 well, Stu will have to identify what the
9 procedure is, what the thing is there but
10 okay.

11 CHAIRMAN GRIFFON: Yes, yes. All
12 right. So I am moving on to 114.5 now. It's
13 the next one I had. Oh, and it says no
14 further action.

15 The reason that is highlighted, I
16 wanted to make sure that I captured the
17 response correctly from our notes that people
18 have from the last meeting. That must be the
19 reason I left it highlighted. I have NIOSH
20 and SC&A agreeing, but I wanted to make sure
21 I wasn't misstating something there.

22 114.5.

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1 MR. HINNEFELD: I guess I must
2 agree with that because I don't have a note in
3 my notes about that one.

4 MR. FARVER: I don't either.

5 CHAIRMAN GRIFFON: All right.

6 MR. FARVER: Just to tell you,
7 this has to do with the CATI information and
8 our view they didn't consider all the CATI
9 information. I think we just agreed that they
10 probably should have done a little better job
11 of including it.

12 CHAIRMAN GRIFFON: Yes. Okay. I
13 guess I just wanted to make sure that NIOSH
14 agreed with that. All right.

15 Scanning down to 118.1 --

16 MR. FARVER: This was a question
17 about the response of some dosimeters. It's
18 a dual film dosimeter, and when you get up
19 above seven rem or so --

20 CHAIRMAN GRIFFON: Right, right.

21 MR. FARVER: -- how does it
22 behave?

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1 CHAIRMAN GRIFFON: I don't know.
2 In my note there, it doesn't specifically give
3 NIOSH an action on that, but it sort of leaves
4 it hanging out there that you still have
5 concern about it. Yes.

6 MR. HINNEFELD: I have in my note
7 that's an active item.

8 CHAIRMAN GRIFFON: Yes, yes.

9 MR. HINNEFELD: I had almost no
10 time to prepare for this meeting. So I don't
11 know that I have received anything on this.

12 CHAIRMAN GRIFFON: So I'll put it
13 as an active item from NIOSH. Is that fair,
14 Stu, or are you still --

15 MR. HINNEFELD: Yes.

16 CHAIRMAN GRIFFON: Okay.

17 MR. HINNEFELD: Yes, that's fair.
18 If -- in fact, I may have received something
19 from the contractor --

20 CHAIRMAN GRIFFON: Okay.

21 MR. HINNEFELD: -- but that
22 doesn't affect this. But that's correct. It

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1 is still active.

2 CHAIRMAN GRIFFON: There's only
3 going to be a few. So we're really narrowing
4 it down here. 118.6, this says both to
5 further review, NIOSH and SC&A.

6 MR. FARVER: My notes say, review.
7 Send in the runs to Stu, and then on 12/8, to
8 review again, and I did that, and I marked
9 that, okay. So that means I reviewed what
10 they did, and I am okay with what they did.

11 CHAIRMAN GRIFFON: What did -- can
12 you fill us in on sort of --

13 MR. FARVER: I think I know this
14 case. I believe this is an Idaho RaLa
15 incident. And there was iodine. And there was
16 questions about how the bioassay was
17 interpreted. And this has been going on for
18 quite some time going back and forth.

19 CHAIRMAN GRIFFON: Yes.

20 MR. FARVER: And I think we
21 finally looked at it. You know, they sent us
22 their files, and we agreed that that's an okay

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1 way to handle the incident. That's the short
2 story.

3 CHAIRMAN GRIFFON: I was hoping to
4 have a little more information on the story
5 there, but do you have --

6 MS. BEHLING: This is Kathy. I
7 think that this was maybe the case where there
8 were several bioassay files, included in this
9 case, and one was considered a secondary file.

10 And I believe when we first
11 reviewed this case, we looked at that
12 secondary file, assumed it was what should
13 have been used, that it was not what was used
14 by NIOSH. And when we reevaluated the case,
15 we realized that NIOSH did use the correct
16 number, and that what was handwritten on
17 another document was different than the actual
18 bioassay records. So we had selected data off
19 of this secondary handwritten bioassay record,
20 which was inappropriate.

21 And NIOSH I think reevaluated
22 based on the correct data. I believe that's

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1 the case for this one.

2 CHAIRMAN GRIFFON: Yes, that seems
3 -- I was looking through the previous back and
4 forth, and that does seem like what happened,
5 Kathy. There was some question about which
6 sample was used.

7 Okay. I'm okay with that. If
8 anybody else has questions on it? Brad?

9 MEMBER CLAWSON: No.

10 CHAIRMAN GRIFFON: All right. So
11 that item is closed now. I have, SC&A agrees
12 with NIOSH's reevaluation, no further action.

13 118.7. Is this the same case?

14 MEMBER CLAWSON: Yes.

15 CHAIRMAN GRIFFON: Yes. And it's
16 the same issue, right? Yes. Okay. So we've
17 got the same conclusion.

18 MEMBER CLAWSON: Right.

19 CHAIRMAN GRIFFON: All right.

20 MR. FARVER: Yes.

21 CHAIRMAN GRIFFON: Okay. I have
22 the last couple here, but these might be my

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1 questions more than -- 120.5, I have that
2 there was agreement, and then I have this
3 question about no effect on the case. I just
4 wanted to make sure that we -- I'm pretty sure
5 it wasn't in my notes, and I didn't want to
6 assume anything. This is 120.5.

7 MR. HINNEFELD: I didn't make a
8 note on 120.5.

9 MR. FARVER: No. I didn't either.

10 CHAIRMAN GRIFFON: Okay.

11 MR. FARVER: Because I think we
12 looked at this as just has to do with the dose
13 reconstructor normalized data that really
14 didn't need to be normalized.

15 CHAIRMAN GRIFFON: I'm sure if
16 there was an effect on the case, we would have
17 brought it up during the discussion.

18 MR. FARVER: Right.

19 CHAIRMAN GRIFFON: The same thing
20 on the last one. And that's the same case.
21 Okay. So I just want to -- usually when I'm
22 making my notes from the hard copy, I put that

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1 there. And I didn't see it this time. I'm
2 just making sure.

3 Okay. So we're through the sixth
4 set. Look at that. We only have a few
5 remaining, so next time I will do what Scott
6 suggested. I don't know if we were online at
7 that point, but for the next meeting, I'll try
8 to, since we're down for the sixth and seventh
9 set, we're going to be down to like a couple
10 of findings. And before the meeting, I'll put
11 down, you know, discussing items 117 point
12 whatever.

13 And then we'll get this done with
14 -- I think I counted in my head maybe three or
15 four that have little things left, right? Two
16 to four, anyway. All right. But I will get
17 those out, along with the updated matrix,
18 before the next meeting.

19 Why don't we take five? Everybody
20 get the seventh matrix together, and we'll
21 reconvene in like five to ten minutes.

22 MEMBER MUNN: Thank you for having

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1 sent it.

2 CHAIRMAN GRIFFON: Okay. I'm not
3 sure what I said, but thanks, Wanda.

4 Oh, sending it? Okay.

5 MR. KATZ: Okay. I'm going to
6 just put the line on mute for five minutes.

7 MEMBER MUNN: Thanks, Ted.

8 (Whereupon, the above-entitled
9 matter went off the record at
10 10:34 a.m. and resumed at 10:46
11 a.m.)

12 MR. KATZ: We are back, folks on
13 the phone. Wanda, are you there?

14 MEMBER MUNN: Yes, I am.

15 MR. KATZ: And Kathy, do we have
16 you again?

17 MS. BEHLING: Yes, you do. I'm
18 here.

19 MR. KATZ: Great.

20 CHAIRMAN GRIFFON: All right.
21 We're moving right along. We're going to move
22 on to the seventh set of cases. And we have

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1 the first one, had an action items here,
2 121.1, NIOSH will evaluate the use of OTIB-
3 0070 and TBD 6000 in place of the approach
4 used in this case.

5 MR. HINNEFELD: I do have that in
6 my notes.

7 CHAIRMAN GRIFFON: You said you
8 have a response to that, Stu, or --

9 MR. HINNEFELD: No, I don't have a
10 response. I have notes.

11 CHAIRMAN GRIFFON: Okay.

12 DR. MAURO: Let me -- I can help
13 out a little bit. This is Aliquippa Forge.
14 The approach that was taken to do the external
15 dose is based on a radiological survey in 1978
16 taken as part of the FUSRAP characterization
17 program.

18 In the external radiation field,
19 they have some numbers, and you end up using
20 the median dose for 1978 with distribution,
21 and assigning that as the external dose to a
22 guy who worked there in 1950.

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1 Now the problem with that is
2 you've got a 28-year time spread. So your
3 recourse is -- well, the thing we suggested is
4 -- that was the problem. Second, the worker
5 turned out to be a guy who shovels briquettes
6 into the furnace.

7 So if anybody is going to get, you
8 know, both from an internal and an external
9 point of view, conceptually the problem is
10 this. You got this big time spread. You
11 really can't use the 1978 data to apply to a
12 guy in 1950.

13 On top of that, even if you have
14 some good generic information for the 1950s,
15 this guy's job was a nasty job. He was
16 shoveling briquettes into a furnace. So I
17 think that your response, that is, that we'll
18 take a look at OTIB-0070, which is the
19 residual period, 1950 on for Aliquippa Forge,
20 no operations. But it's right after the
21 operations.

22 CHAIRMAN GRIFFON: Right, right.

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1 DR. MAURO: So if you go -- I
2 would say there are several scenarios in OTIB-
3 0070 which might fit this well. And that
4 might be your strategy. Or you may decide,
5 like one of the things we suggested, go with
6 the upper 95th percentile in your FUSRAP data.
7 I would prefer one of the better scenarios at
8 70.

9 MR. HINNEFELD: I've got the
10 notes.

11 CHAIRMAN GRIFFON: We'll leave it
12 on NIOSH's action.

13 MR. HINNEFELD: Like I said, I may
14 even have something from the contractor on it,
15 but I haven't distributed them.

16 CHAIRMAN GRIFFON: Okay. And then
17 I'm thinking the next one is the same. It
18 looks like 121.2 it's the same case, same --

19 MR. HINNEFELD: Yes.

20 CHAIRMAN GRIFFON: The only thing
21 I'll ask is bear with me, because I just want
22 to update this matrix live. It's so much

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1 easier if I have it done.

2 DR. MAURO: Yes. The problem, the
3 next one is different. And in concept here,
4 let me explain --

5 CHAIRMAN GRIFFON: Which one are
6 you on now?

7 DR. MAURO: I'm on the second one.
8 In other words -- well, I'm looking at the
9 strength. The one I just talked about now is
10 external exposure.

11 CHAIRMAN GRIFFON: 121.2?

12 DR. MAURO: Let me see. 121.2.
13 Let's see where we go to 2. Yes.

14 MR. HINNEFELD: It sounds like
15 121.2.

16 DR. MAURO: No, I'm sorry. I'm in
17 122 already. No, I'm sorry. 121.1, it's the
18 same problem. So in other words, whether
19 we're talking internal, any of the issues
20 associated with 121.1 have to do with using
21 1978 data, whether it's external or internal,
22 to apply to a 1950 worker.

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1 And OTIB-0070, a newer document,
2 gives you a vehicle to come at this problem.
3 How you select to use OTIB-0070, because you
4 have a lot of options, is really going to be
5 at play eventually. That's all I had on
6 121.1.

7 CHAIRMAN GRIFFON: Okay. And
8 that's the same for 121.2, I think.

9 DR. MAURO: No. One twenty-two is
10 different. That is Simonds Saw.

11 CHAIRMAN GRIFFON: No, not 122.

12 DR. MAURO: Oh, I'm sorry.

13 CHAIRMAN GRIFFON: 121.2.

14 DR. MAURO: I keep doing that.

15 CHAIRMAN GRIFFON: 121.3, though,
16 I have a different note here.

17 DR. MAURO: Okay.

18 CHAIRMAN GRIFFON: It says, SC&A
19 to review NIOSH response.

20 DR. MAURO: Okay.

21 CHAIRMAN GRIFFON: And maybe my
22 note is wrong, but that is a different thing,

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1 it looks to me.

2 MR. FARVER: It has to do with the
3 internal dose, John.

4 DR. MAURO: Okay. Oh, this might
5 go back to the re-suspension factor business
6 because this is all residual period. I
7 happened to look at the -- if you give me a
8 minute?

9 CHAIRMAN GRIFFON: Okay.

10 DR. MAURO: This is 121.3. Let me
11 go back to my report.

12 CHAIRMAN GRIFFON: Apparently last
13 time --

14 MR. FARVER: The intake values
15 that they used were derived for residual
16 contamination characterization data collected
17 in 1992 and '93. SC&A believed 1992-93 data
18 may not be applicable to the period from 1950
19 to 1978.

20 CHAIRMAN GRIFFON: But we had that
21 before, right?

22 MR. HINNEFELD: I mean,

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1 realistically, I mean, OTIB-0070 would address
2 the internal as well.

3 DR. MAURO: Yes. It would do
4 both.

5 MR. HINNEFELD: I mean,
6 realistically the action that we are going to
7 take for 1 and 2 by just extending it into the
8 internal dose would be in another evaluation.

9 CHAIRMAN GRIFFON: But in this
10 case, didn't you have site-specific data? I
11 mean, you don't have --

12 MR. HINNEFELD: There is
13 site-specific data here.

14 CHAIRMAN GRIFFON: That's right.
15 Yes.

16 MR. HINNEFELD: There is
17 contemporary. I mean, there was
18 decontamination, 1949 data. There is 1949
19 survey.

20 DR. MAURO: And 70 will give you
21 the path forward.

22 MR. HINNEFELD: And, see, that's

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1 why I am saying since you've got 1949 data and
2 now there is TIB 70, we could go back. Rather
3 than justifying the use of the '74 numbers,
4 which is essentially what this does, our
5 response is simply --

6 DR. MAURO: Tried to, right.

7 MR. HINNEFELD: -- tries to
8 justify these 1974 numbers or '78 numbers,
9 whatever they were.

10 DR. MAURO: Yes.

11 MR. HINNEFELD: Rather than try to
12 justify those, since we have the data from 49,
13 TIB --

14 DR. MAURO: Seventy.

15 MR. HINNEFELD: -- 70, we could
16 then just by extending the 1 and 2, what we're
17 going to do with 1 and 2 in the internal, we
18 can deal with this one as well and kind of
19 illustrate.

20 DR. MAURO: What is going to
21 happen on 70? We did discuss 70 before. It
22 is the slope. That is, you're in a very good

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1 position here. Here you've got a guy who
2 worked in the early years, right after the
3 termination of operations, '49.

4 You've got data characterizing
5 operations. Pick up right from there, whether
6 it's internal or external. And you say, okay.
7 What is going to happen in 1950? How many
8 years he goes on after that.

9 MR. HINNEFELD: Yes.

10 DR. MAURO: It may not be many.
11 And the only issue we had with your OTIB-0070
12 is how you develop your slope. You know you
13 have this much airborne activity as soon as
14 the operations stop. You start there. Now
15 it's going to start to go down.

16 Now, you used I think one percent
17 per year.

18 MR. HINNEFELD: No it's more than
19 that. It's faster than that.

20 DR. MAURO: One percent per day?

21 MR. HINNEFELD: It might be one
22 percent per day.

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1 DR. MAURO: Yes. We had a problem
2 with that because if it's one percent per day,
3 you could imagine it's gone. In a year, it's
4 gone.

5 MR. HINNEFELD: Yes. I don't
6 know. I thought it was --

7 MR. SIEBERT: There was a first
8 year reduction. And then after the second or
9 third year, then --

10 MR. HINNEFELD: There are various
11 techniques. If you have data at two points,
12 which in this case we apparently do, we have
13 1949, we have 1978 data, I think what TBD 7
14 tells you is you set the two data points.

15 DR. MAURO: Yes, as long as there
16 was no decontamination between the two
17 periods.

18 MR. HINNEFELD: Yes.

19 DR. MAURO: That was our criticism
20 when you applied on OTIB-0070. You applied it
21 in another case. That's how we were reviewing
22 it.

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1 CHAIRMAN GRIFFON: Then the other
2 case, their site-specific question might be
3 the data itself, you know. In other words,
4 the 1978 data, it's a decon survey. How
5 robust is that data set? And how useful is it
6 for extrapolation?

7 MR. HINNEFELD: It was probably
8 FUSRAP, right? It's a FUSRAP survey probably
9 in the condition since we got here. We've got
10 to do something here.

11 DR. MAURO: If you have
12 comprehensive pre-cleanup.

13 MR. HINNEFELD: Yes.

14 DR. MAURO: FUSRAP data, '78,
15 giving you surface activity, maybe some
16 airborne activity. And you have your 1949,
17 you know, these are the levels we had airborne
18 in our surfaces. Now you have a pretty robust
19 way to do the slope.

20 CHAIRMAN GRIFFON: If you have a
21 comprehensive FUSRAP survey for any site,
22 I would like to see it.

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1 DR. MAURO: You would like to see
2 it?

3 (Laughter.)

4 CHAIRMAN GRIFFON: I mean, their
5 goal was to see, do we need cleanup or not?
6 So they kind of stopped when --

7 MR. HINNEFELD: They didn't really
8 do it.

9 CHAIRMAN GRIFFON: Right.

10 MR. HINNEFELD: In fact --

11 CHAIRMAN GRIFFON: And
12 comprehensive is not --

13 MR. HINNEFELD: That kind of
14 information would be available in the actual
15 FUSRAP docket probably, if it did exist.

16 CHAIRMAN GRIFFON: Yes. Once they
17 saw that they had required a cleanup --

18 MR. HINNEFELD: That they required
19 cleanup.

20 CHAIRMAN GRIFFON: -- why bother
21 going much further comprehensively?

22 MR. HINNEFELD: That's what the

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1 suit in discovery --

2 CHAIRMAN GRIFFON: That's why
3 you've got to be careful how you use that
4 data, I think.

5 MR. HINNEFELD: Yes. There might
6 be additional. And, again, like I said in
7 this case, we've got before and after data.
8 I mean, before the --

9 CHAIRMAN GRIFFON: You have
10 something there.

11 MR. HINNEFELD: We have
12 operational period data and operational
13 period. Then you have got something at both
14 ends. There should be something that -- I
15 mean, that would at least get this finding
16 fixed in terms of this finding and would put
17 the debate in the TBD 70 debate if there's a
18 TBD 70 debate in terms of that would be your
19 part.

20 The way you are using this TBD 70
21 is that initial FUSRAP survey is really a good
22 enough survey or should you be looking at the

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1 extended condition, which they may have done
2 later.

3 DR. MAURO: Yes. I recall there
4 were particularly five or six different
5 alternative approaches in TBD 70 depending on
6 the nature of the data you have.

7 MR. HINNEFELD: Yes.

8 DR. MAURO: And you have to choose
9 which one is best. And I recall one of the
10 options was when you don't have back-end data
11 and you have to assign a slope to your
12 front-end data, we had a problem with that.

13 MR. HINNEFELD: Okay. Yes.

14 CHAIRMAN GRIFFON: Okay. So I
15 have the action. I captured the action now
16 that NIOSH is going to consider TIB 70 as
17 pertains to this case basically.

18 Moving forward, now we are up to
19 122, John. Now you're on again.

20 DR. MAURO: Yes. That was it
21 through a lot of --

22 CHAIRMAN GRIFFON: This says,

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1 NIOSH will follow up on validity of this
2 approach for the job in question. That's
3 122.1. So we have this. What was the job?

4 DR. MAURO: This is the guy who
5 was a shoveler.

6 CHAIRMAN GRIFFON: Oh, okay.

7 DR. MAURO: Yes. I remember this
8 story. Yes.

9 CHAIRMAN GRIFFON: This is Simonds
10 Saw?

11 DR. MAURO: This is Simonds Saw.
12 This is a worker who worked at the furnace.
13 His job was to heat up the billets, heat them
14 up so they could go through rolling.

15 There is a generic Simonds Saw
16 matrix that was applied to this person. And
17 I believe you applied the methodology
18 correctly, but you didn't take into
19 consideration this guy's job. In other words,
20 it turns out he was a pretty unusual guy
21 because of his job.

22 One, with regard to external

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1 exposure during operations now, -- let's talk
2 during operations -- your generic approach is
3 the person is standing close to a rod, 3 and
4 a half hours a day close to a rod, and 3 and
5 a half hours close to a billet. In his case,
6 he would only be next to billets, which
7 effectively increases his dose, external dose,
8 by about 40 percent.

9 So we believe in his case, you
10 know, that generic approach doesn't really
11 apply. If you were going to assume seven
12 hours a day of external exposure up close and
13 personal, for this person, it would have been
14 better if it was all billets.

15 And it turns out the radiation
16 field from the billet is about 40 percent
17 higher than from a rod. So the dose could
18 have gone up a bit on that.

19 That was one thing. That was the
20 external part. The internal part had to do
21 with the dust loadings. Now, I believe you
22 had generic information on what the inhalation

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1 rate was for the uranium and everything else.
2 However, we felt that, rather than working
3 from the 50 percentile from this guy, because
4 of his job -- and we have a lot of information
5 on this -- when a person is a furnace
6 operator, he gets exposed to the high-end
7 continuously. I would have gone with a high
8 end of a fixed. Rather than the full
9 distribution that was centered off the 50
10 percentile, we suggested for him, he might
11 have been better off going with the upper end
12 because of his job category.

13 So those are the two, I mean
14 conceptually, the two concerns we had. And I
15 don't know the degree to which you have had --
16 I will look at your matrix. You may have
17 responded. That was my concern.

18 CHAIRMAN GRIFFON: That's what I
19 was going to ask. Are these still active,
20 Stu, or did you --

21 MR. HINNEFELD: Well, I don't know
22 what I have done. So I will have to check.

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1 I sent this, I'm pretty sure, yes, to our
2 contractor a couple of weeks after this
3 meeting, the December 8 meeting. They could
4 very well have replied to me by now and I just
5 haven't managed to sort through it.

6 When they send a reply, I normally
7 like to see if I like it before I send it to
8 the Subcommittee. And so I have not done
9 that, I don't think.

10 So unless I did it prior to --
11 it's a thought. We were going to meet in late
12 January.

13 CHAIRMAN GRIFFON: Yes.

14 MR. HINNEFELD: Hang on.

15 That would be my message, that
16 message going on the 23rd or something. That
17 was what I was talking about related to the
18 contract.

19 DR. MAURO: By the way, as another
20 point -- and I don't know from a policy point
21 of view how to do this. Bethlehem Steel is
22 very similar to this site, the kinds of

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1 exposures people get. What you ended up doing
2 with Bethlehem Steel was what I consider to be
3 a truly bounding assumption.

4 Use some billet workers spent one
5 foot away from an infinite slab, which was 2
6 m per hour. You placed an upper bound. In
7 this case you were more sophisticated. You
8 said, well, wait a minute. We know that this
9 guy -- we are going to assume that people are
10 exposed to billets and rods, single ones. So
11 what happens is that reduces the exposure.

12 So in a funny sort of way, it
13 seems like you're giving a little bit more
14 benefit to an applicant from Bethlehem Steel
15 than you would here. There may be good reason
16 for that because I think that these -- I mean,
17 maybe the nature of the work in Bethlehem
18 Steel, we had these very long rods, stacked
19 up, which, for all intents and purposes, the
20 geometry was like being next to an infinite
21 slab.

22 While in this case the handling of

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1 the rods was one by one, one came in, we
2 heated it up. We rolled it, moved it out.
3 And so no one really is up close and personal
4 to an infinite slab. It's not apparent if
5 that is the case.

6 MR. HINNEFELD: Well, in
7 retrospect, I kind of wish we had chosen a
8 dose rate from uranium metal, --

9 DR. MAURO: Yes. That's it.

10 MR. HINNEFELD: -- rather than
11 trying to be too site-specific and too this
12 and that.

13 DR. MAURO: It's not that much
14 different, a factor of --

15 MR. HINNEFELD: It is, yes, a
16 factor of two. You've probably got it covered
17 in all of these situations.

18 -- and just said, okay. For these
19 places that rolled uranium or dealt with
20 uranium metal, this is a uranium metal dose
21 rate at this, this, and such and such, and
22 based it on something, whether it be an

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1 infinite slab or whether it be --

2 DR. MAURO: Right.

3 MR. HINNEFELD: -- a stack of
4 metal, a couple of rods, or you want an array
5 of rods or an array of billets or something
6 like that. Keep it simple. Give it to
7 everybody.

8 Now, not having started with that,
9 I think that because we have an approach in
10 one site, you know, like an infinite slab, I
11 don't know that we necessarily want to tie
12 ourselves to always do it that way.

13 DR. MAURO: Sure. What is --

14 MR. HINNEFELD: And so there may,
15 in fact, be some situations --

16 DR. MAURO: There may be a good
17 reason here.

18 MR. HINNEFELD: -- where these
19 aren't going to be equitably treated.

20 DR. MAURO: There was one last
21 point on this case that was surprising to me.
22 In this CATI, he had another cancer that was

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1 not in his records. His wife, I guess, they
2 interviewed, said that there was a second
3 cancer that was never credited to this person.

4 There may be good reason for that,
5 but I don't know. So that was an issue we
6 raised.

7 MR. HINNEFELD: I can tell you
8 what should have happened. We should have
9 identified that to the Department of Labor and
10 let them deal with it because we cannot do
11 that. We can only reconstruct for the cancers
12 that the Department of Labor verifies and
13 sends to us. So we cannot add a cancer.

14 So we would not get to a different
15 dose reconstruction because that was told to
16 us. We should have asked the claimant to
17 convey that information to the Department of
18 Labor.

19 CHAIRMAN GRIFFON: 122.10 says,
20 additional cancer was added by DOL in March
21 2008.

22 MR. HINNEFELD: Okay.

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1 CHAIRMAN GRIFFON: No further
2 action. Yes.

3 MR. HINNEFELD: Okay.

4 CHAIRMAN GRIFFON: So I think we
5 addressed that in the last minute.

6 MR. HINNEFELD: Okay. Good.

7 DR. MAURO: Oh, okay.

8 CHAIRMAN GRIFFON: So summarizing
9 for this case, I have 122.1 and 122.3 as
10 remaining follow-ups for NIOSH. And if you go
11 on down, the other ones are these white
12 papers, these other issues, a lot going to the
13 procedures committee.

14 122.7 I have no resolution there
15 and no NIOSH response, actually. We never got
16 an initial NIOSH response on this thorium
17 inhalation question.

18 MR. HINNEFELD: I guess I probably
19 still owe it to you.

20 DR. MAURO: Yes. We had a number
21 of questions on this, but, if I recall, the
22 thorium contribution is probably relatively

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1 small in terms of the throughput.

2 But yes, we did have a number of
3 -- I see them here, a number of questions on
4 thorium.

5 MR. HINNEFELD: Yes. Scott
6 reminds me this will be an issue with TBD for
7 this site, you know, what do we do with that.
8 And it could very well be.

9 I would think today we might have
10 different information than we had when we
11 wrote the TBD. And we may want to just make
12 the adjustment -- I don't know -- or we may
13 have sufficient information that would support
14 the numbers. I am completely --

15 CHAIRMAN GRIFFON: Stop me if you
16 see anything else, but I am up to case 125.1
17 now.

18 MR. HINNEFELD: Okay.

19 CHAIRMAN GRIFFON: Does that make
20 sense, the 84 -- I vaguely remember this one.
21 Doug, do you --

22 MR. FARVER: I couldn't find the

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1 dose --

2 CHAIRMAN GRIFFON: Right.

3 MR. FARVER: -- for the one year.

4 CHAIRMAN GRIFFON: The one year
5 didn't appear, right?

6 MR. FARVER: And I have gone back.
7 And I looked. And what they're referring to
8 was 1984 dose. The IREP as entry number 29 in
9 the IREP input is 1948 dose if you look at the
10 IREP table.

11 MR. SIEBERT: Yes. I think that
12 was just read wrong.

13 MR. HINNEFELD: A typo there.

14 MR. SIEBERT: That's initially
15 48/84 when we were answering it. I think we
16 still owe you a response on that.

17 MEMBER MUNN: Did you say '48 or
18 '84?

19 MR. SIEBERT: I believe in the
20 response, we had thought that was -- the dose
21 reconstructor came back. And we were saying
22 that that was where the '84 was. And I think

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1 we just -- it was a misread, that it was
2 actually '48. So I think I still need to
3 track this down.

4 MR. FARVER: Yes. And, as far as
5 I can tell, there is no 1984 entry in the IREP
6 table.

7 CHAIRMAN GRIFFON: Okay.

8 MR. FARVER: Let's see. To be
9 clear on that, that's for the recorded photon
10 dose. There are entries for 1984 for missed
11 photon dose.

12 CHAIRMAN GRIFFON: Okay. So
13 that's still an active action item. The next
14 one I had is 125.4, still the same case here.
15 This is regarding dose from whole body counts.
16 So I guess this dose wasn't included is what
17 you are saying, even though there is a small
18 --

19 MR. FARVER: Correct. It may be a
20 small dose, but it just wasn't included. As
21 we go through these, a lot of these will come
22 down to, well, why wasn't that caught in a

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1 review? And we can go through a lot of these
2 and ask that same question. And I don't know
3 what the Board or --

4 CHAIRMAN GRIFFON: Well, is there
5 a level on this, Stu -- yes. I know. I know
6 what you are saying, Doug, but is there a
7 level on this that you consider de minimis and
8 you don't include them or --

9 MR. HINNEFELD: I would say that
10 it would be very likely for a reviewer to
11 notice this and not care. I think that would
12 be very likely that, you know, we have seen --
13 if this is a Hanford case, that must be -- is
14 that the ingestion, 136 one, 65 and 147? And
15 that's under water. It shows up in whole body
16 counts because of that.

17 MR. FARVER: Probably, yes.

18 MR. HINNEFELD: That sounds
19 familiar to me.

20 DR. MAURO: Zinc is. Sodium is --

21 CHAIRMAN GRIFFON: I don't know.

22 Sodium was an issue in the water, yes.

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1 Sodium-22 is --

2 MR. HINNEFELD: It could have been
3 -- and not knowing very much about this case,
4 I probably shouldn't say very much. But it
5 could be that it's apparent from the POC and
6 the dose that this is going to add officially
7 to it. And so this isn't going to change it.
8 So we're going to say okay.

9 I think we want to be a little
10 careful about drawing quality program
11 conclusions or how good is the quality program
12 from a finding like this.

13 Now, if you had to draw any
14 conclusions from other findings, you may want
15 to draw that conclusion. But from a finding
16 like this, where an experienced reviewer -- I
17 mean, our guys who see these things see a ton
18 of them. And they pretty much kind of know
19 what is going to matter and what doesn't.

20 And so they may just say, you
21 know, if I don't say okay to this, that means
22 it's got to go back over to the contractor.

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1 It's got to get through their system. It's
2 got to put in five millirem total or whatever
3 it turns out to be, which isn't going to
4 change anything. It's not going to matter to
5 anybody. Why don't I just say okay? I mean,
6 that process has occurred.

7 MR. FARVER: Well, there were
8 three whole body counts. All of them exceeded
9 cesium-137. The DR report clearly states
10 there were no positive cesium-137, sodium-24,
11 or zinc-65 bioassays during the period.

12 MR. HINNEFELD: That is a little
13 more serious. That is clearly a flaw, a
14 mistake that should not have been there. Now,
15 those are positive counts, though, right?
16 They exceed the protection level?

17 MR. FARVER: Yes, I believe.

18 MEMBER MUNN: How is it that it
19 has been reported as a finding, that we simply
20 have NIOSH add it quickly, a significant
21 effect on dose, that it be closed?

22 MR. HINNEFELD: Well, we need to

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1 look at it. See, I am just talking out of
2 school here.

3 CHAIRMAN GRIFFON: Yes. That is
4 what we are trying to find out, Wanda. If
5 NIOSH agrees and it doesn't have an effect on
6 the case, that is different. That is a
7 different answer, but --

8 MR. HINNEFELD: I think your note
9 describes it exactly.

10 MR. FARVER: An example, in June
11 1960, cesium-137 result of 8.4 nanocuries and
12 the fallout level -- I mean, you could say
13 it's fallout. The fallout level is 6.8. So
14 it exceeded the fallout level and, therefore,
15 by your documents should be assessed.

16 CHAIRMAN GRIFFON: Okay. So yes.
17 I think that note still applies, right?

18 MR. HINNEFELD: Yes.

19 MR. FARVER: And there was a
20 second one that also exceeded the fallout
21 level, in '69, I believe.

22 MR. HINNEFELD: Yes.

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1 CHAIRMAN GRIFFON: So the next one
2 I have is 125.6. SC&A was going to review
3 this and compare it to the currently available
4 TBD.

5 MR. FARVER: Okay.

6 CHAIRMAN GRIFFON: So I think it
7 was working from an old TBD, right? Yes.
8 125.6 we're on.

9 MR. FARVER: Yes. Let me get my
10 notes here. Okay. Let's go back to the NIOSH
11 response in the third column, May 3rd. If we
12 go up to the first section, it says, the
13 guidance provided in section 5.1 is probably
14 blah, blah, blah. The TBD author --
15 recognized by the TBD author to be incorrect,
16 and DRs were advised that the period should
17 also include 1947.

18 Now, the question comes, is that
19 notification to the DRs documented somewhere,
20 that you told the dose reconstructors to
21 extend that period or how would they know
22 that?

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1 MR. HINNEFELD: Scott, how did
2 that --

3 MR. SIEBERT: I would assume that
4 would come out in one of our weekly conference
5 calls.

6 MR. FARVER: Okay. So, even
7 though it's a change to the document, it's not
8 really documented anywhere or --

9 MR. SIEBERT: Well, that would be
10 ahead of the fact that the next rev of the TBD
11 did incorporate that change.

12 MR. FARVER: Okay.

13 MR. SIEBERT: So it's a question
14 of what do you do up until the time that it's
15 officially changed in the TBD?

16 MR. FARVER: And do you need some
17 kind of documentation? I don't know how you
18 fill that gap. I would think you would at
19 least have a memo documented to hold that for
20 that period because, even though Rev 2
21 incorporated the change, the dose
22 reconstructor didn't use Rev 2.

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1 MR. HINNEFELD: Right.

2 CHAIRMAN GRIFFON: I mean, this
3 goes back to the dose reconstruction notes
4 also, doesn't it, Scott? Would those have --
5 because I know they are modified in between,
6 you know, as you go kind of.

7 MR. SIEBERT: During that time
8 period. Once again, this is the old learning
9 curve and --

10 CHAIRMAN GRIFFON: Right.

11 MR. SIEBERT: -- how old it is
12 kind of thing.

13 CHAIRMAN GRIFFON: Right.

14 MR. SIEBERT: I can't just tell
15 you off the top of my head.

16 CHAIRMAN GRIFFON: No, no. I
17 know. I know.

18 MR. SIEBERT: Right.

19 CHAIRMAN GRIFFON: This comes up a
20 lot, as Doug says, also that if there was a
21 guideline.

22 MR. SIEBERT: In that interim

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1 period.

2 CHAIRMAN GRIFFON: Right. But if
3 there were these notes that applied while the
4 case was being worked on, you know, then it's
5 easier to audit. I mean, it's easier to look
6 at and say, okay. This is what they're
7 supposed to be doing, you know, instead of
8 speculating.

9 MR. SIEBERT: Right.

10 CHAIRMAN GRIFFON: Yes.

11 MR. SIEBERT: You know, I'll check
12 back and track down what I can find.

13 CHAIRMAN GRIFFON: But I am not
14 sure what we expect back from this, Doug. I
15 mean, it's not in the case file, right? It
16 probably happened on one of your conference
17 calls in between time. And the current TBD
18 covers it. So what more action is there for
19 us to discuss --?

20 MR. SIEBERT: It's more --

21 CHAIRMAN GRIFFON: -- Other than
22 that generic issue of we would like --

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1 MR. SIEBERT: What can you do?

2 CHAIRMAN GRIFFON: -- To see a
3 document in the future cases?

4 MR. SIEBERT: Right, for this
5 specific case here.

6 CHAIRMAN GRIFFON: Yes.

7 MR. SIEBERT: And they explain
8 what they did, which is okay.

9 CHAIRMAN GRIFFON: You're okay
10 with that, right?

11 MR. SIEBERT: Sure.

12 CHAIRMAN GRIFFON: So I don't
13 think we need any more action on this case
14 particularly, but you get the general concern.

15 MR. SIEBERT: Yes. How do you
16 want to handle an interim period --

17 CHAIRMAN GRIFFON: The document,
18 yes.

19 MR. SIEBERT: -- when you find out
20 some information?

21 CHAIRMAN GRIFFON: So I am going
22 to say I think this is closed for this case or

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1 for this finding, yes. Okay.

2 Sorry. I just lost my place in
3 the document. What number was that again?
4 One twenty?

5 MR. FARVER: 5.6, 125.6.

6 CHAIRMAN GRIFFON: 125.6. Thank
7 you.

8 All right. So 125.9, we had a
9 couple of items here.

10 MR. FARVER: 125.9. This has to
11 do with information. We may not have all the
12 radiological incidents and bioassay data.

13 CHAIRMAN GRIFFON: Right.

14 MR. FARVER: There are some
15 incidents identified in the DOE files that
16 indicated that bioassay was requested on
17 certain dates, but those dates don't
18 correspond to bioassays in employees' records.

19 CHAIRMAN GRIFFON: So am I safe to
20 assume this is still an open --

21 MR. HINNEFELD: Yes.

22 CHAIRMAN GRIFFON: 126.2, new case

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1 here. So this a question where the TIB 2 is
2 bounding based on the -- it must have been for
3 the highly exposure level job. Is that what
4 you're saying, John? Yes.

5 DR. MAURO: You can see the first
6 column what he is doing.

7 CHAIRMAN GRIFFON: Right.

8 DR. MAURO: Yes. Column 3 gives a
9 nice summary of his job.

10 CHAIRMAN GRIFFON: Yes. Stu, any

11 --

12 MR. HINNEFELD: I don't have any
13 updates --

14 CHAIRMAN GRIFFON: Okay.

15 MR. HINNEFELD: -- from what your
16 note says.

17 CHAIRMAN GRIFFON: All right.

18 MR. HINNEFELD: Your note is what
19 I have.

20 CHAIRMAN GRIFFON: Right.

21 DR. MAURO: I know there were
22 circumstances of when we raised questions

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1 about OTIB-002 being valid. We all agree that
2 OTIB-002 assumptions are very extreme as a way
3 to place an upper bound on internal exposure
4 when you know for sure that there is no way
5 this guy is going to be compensated. I mean,
6 that is what they intend to do.

7 I know we have raised questions on
8 OTIB-002 when it came to application to places
9 like where there was a lot of residue, thorium
10 residue. The issues I think came up at
11 Fernald, that certain workers that handled the
12 K-65 material, Mallinckrodt, where there were
13 such extreme circumstances that even OTIB-002
14 may not be bounding for the purpose of denial.

15 Is there a reason to believe that
16 this particular person worked at a facility
17 where there was not extreme? My recollection
18 is open --

19 MR. HINNEFELD: Hanford.

20 DR. MAURO: It is the Hanford?
21 Yes. This is Hanford.

22 MR. HINNEFELD: I think the issue

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1 here was part of this last finding we just
2 talked about was the TIB 2 input, you know,
3 the intake set, suite of intakes. So it was
4 used in a TIB 2. You've got several to choose
5 from.

6 DR. MAURO: Yes.

7 MR. HINNEFELD: You chose the
8 non-uranium reactor facility. The comment
9 was, well, they clearly had uranium at
10 Hanford. Why did you choose the non-uranium?

11 Our response is that, well, the
12 guy has a bioassay record for plutonium and
13 fission products but not for uranium. So it
14 indicated he wasn't in the uranium building.
15 So for that, the natural answer is if you've
16 got a bioassay record, why did you use OTIB-
17 002? And there is also a place in the CATI
18 that apparently wasn't completely addressed.

19 Yes. That's what my note says.
20 We just still owe a response.

21 CHAIRMAN GRIFFON: Okay. How
22 about 127.1? I have on this one, it seems to

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1 be I have this highlighted part, additional
2 response. I'm not sure why that is in there.

3 MR. FARVER: 127.1 refers you
4 later on to the CATI report section, section
5 4, which would be finding 127.11, I believe.
6 If you're not confused, I'll try harder. It
7 has to do with work location.

8 MR. HINNEFELD: Yes. The note I
9 made from the December meeting was that we do
10 have the action to provide the additional
11 information that we relied on in our response,
12 where we say that the individual, while they
13 worked in the 100 area, worked in building
14 108, which is not a reactor building.

15 So apparently this is a neutron
16 question or something. I don't know.

17 MEMBER MUNN: Apparently it's a
18 what, Stu?

19 MR. HINNEFELD: Yes.

20 MEMBER MUNN: Yes. It's a what?

21 MR. HINNEFELD: What is it?

22 MEMBER MUNN: What is the

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1 question?

2 MR. HINNEFELD: Well, I don't know
3 what the finding is, but what we said was that
4 this individual -- we found information that
5 this person's assignment, his work location in
6 the 100 area was in building 108. I don't
7 know what that building is.

8 CHAIRMAN GRIFFON: Which is not a
9 reactor building --

10 MR. SIEBERT: It's a biology lab.

11 MR. HINNEFELD: Oh, it's biology
12 lab. So it wasn't a reactor building.

13 CHAIRMAN GRIFFON: We couldn't
14 hear you there, Wanda.

15 MEMBER MUNN: I said 105 was the
16 reactor building in that particular part of
17 the 100 area.

18 MR. HINNEFELD: Okay.

19 MR. KATZ: Thanks, Wanda. Wanda,
20 whatever you just did makes it much easier for
21 us to hear you.

22 MEMBER MUNN: Well, I picked up a

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1 handset and put it up against my ear, but it's
2 almost impossible for me to sit here doing
3 that in that position.

4 MR. KATZ: I don't mean for you
5 for listening but for hearing you when you
6 speak up, that would be great.

7 CHAIRMAN GRIFFON: Yes. When you
8 talk, that is great.

9 MEMBER MUNN: Yes. I understand.
10 Even though I have great faith in this tiny
11 little microphone hidden in my telephone, it
12 clearly pleases me more than it pleases the
13 recipients.

14 CHAIRMAN GRIFFON: All right. You
15 were going to --

16 MR. HINNEFELD: So our action on
17 127.1 from my last note was to provide that.
18 You know, in other words, what is the evidence
19 we use to include the person working in 108?
20 But there are also some CATI. There are
21 several more here on 127, I think.

22 MR. FARVER: I think so, too. It

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1 started off where the DR talks about the
2 employee working in the 100 area and 300 areas
3 and then the NIOSH assumes, for this DR, we
4 will just assume it is all in the 300 area.
5 That is where it leads on to, well, maybe that
6 is not what your already work location, you
7 didn't consider the 100 area. And it just
8 went on from there.

9 CHAIRMAN GRIFFON: Which one,
10 127.1?

11 MR. SIEBERT: 127.1. 108 is the
12 biology lab, as opposed to the 100 area
13 generic. I don't know if we ever got that.

14 MR. FARVER: I don't know. I
15 don't see that here.

16 MR. SIEBERT: Oh, I'll get back to
17 you, then.

18 CHAIRMAN GRIFFON: Yes. I think
19 that's the essence of the question as to you
20 stated that --

21 MR. HINNEFELD: Yes.

22 CHAIRMAN GRIFFON: And it goes

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1 down. You're right. It comes up in 127.5
2 again, same sort of question, I think. Is
3 that right?

4 MR. HINNEFELD: It looks like it.

5 CHAIRMAN GRIFFON: And I am
6 looking further down. 127.8 and 127.10.
7 That's my note, I think, and I think you
8 provided a response, but maybe we were both
9 working from different matrices or something.
10 I don't know. I don't have a response or oral
11 resolution for those.

12 MR. HINNEFELD: Okay. I think
13 there is a response somewhere. And so I will
14 get that out. But there may be some of that
15 additional info as well. Yes. I'll --

16 CHAIRMAN GRIFFON: Okay. Because
17 I don't know if we have discussed -- do you
18 have any notes on those Doug, that we have
19 discussed the resolution on those or --

20 MR. FARVER: On which ones, now?

21 CHAIRMAN GRIFFON: 127.8 and
22 127.10.

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1 MR. FARVER: Nope. I have those
2 as being blank.

3 CHAIRMAN GRIFFON: Yes. Yes. So
4 all right. I will leave that highlighted in
5 there that you need to resend the response.
6 I don't know what happened to the response,
7 but I thought it was --

8 MR. HINNEFELD: Maybe I didn't
9 send it.

10 CHAIRMAN GRIFFON: And they are on
11 my --

12 MR. HINNEFELD: There was one that
13 was written, and I didn't send it.

14 CHAIRMAN GRIFFON: Yes. But
15 either way, that's fine. Okay.

16 I'm down to -- moving right along.
17 Nothing on 128, I didn't have. 129.5 is the
18 next thing I have. So this is another one of
19 SC&A comparing the results -- or NIOSH will
20 compare whole body count results versus what
21 -- using the TIB methodology.

22 MR. HINNEFELD: They did before

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1 versus --

2 CHAIRMAN GRIFFON: Yes, right. Is
3 there an outstanding one?

4 MR. HINNEFELD: Yes. We still owe
5 you what we owe you.

6 CHAIRMAN GRIFFON: Okay. This is
7 a question under your analysis data versus the
8 work history data. You were going to follow
9 up on the --

10 MR. HINNEFELD: Yes, still have
11 that.

12 CHAIRMAN GRIFFON: I am updating
13 these files. So I will also send these right
14 out.

15 MR. HINNEFELD: Okay.

16 CHAIRMAN GRIFFON: That way, you
17 know, because I think the last time I sent my
18 revised matrices out, like the day before,
19 that close to our meeting.

20 On this one, if it's okay, I mean,
21 on the sixth matrix, there were only a few
22 items. And I'll list those separately in the

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1 e-mail to prompt people. But for this one, I
2 will highlight. And I think that works pretty
3 well. You can find them pretty easily, you
4 know.

5 I'm down to 131.4.

6 MR. FARVER: Okay. And that was
7 to us to review. And I looked at their
8 response. And basically I couldn't figure out
9 how they calculated their doses where the
10 calculation is based on IG001 since OTIB-0017
11 wasn't around.

12 CHAIRMAN GRIFFON: What did they
13 send you?

14 MR. FARVER: Well, I looked at
15 their response. And they have it how it was
16 calculated. I could not determine how it was
17 calculated from their response. It probably
18 was not using OTIB-0017 since that was not --

19 MR. SIEBERT: It wasn't available
20 yet, right.

21 CHAIRMAN GRIFFON: Right, right.

22 MR. SIEBERT: Basically a factor

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1 of .94 was used, as opposed to a .3.

2 MR. FARVER: So I would appreciate
3 a sample calculation using the employee's data
4 for a year. That will educate me.

5 CHAIRMAN GRIFFON: Okay. So NIOSH
6 will provide a sample calculation. Okay.
7 That's fine.

8 Okay. 131.6. This is a TIB 54 --
9 whole body count versus TIB 54. Is that the
10 right TIB number?

11 MR. HINNEFELD: Yes.

12 CHAIRMAN GRIFFON: Fifty-three is
13 different. Didn't I have 53 before? Anyway.
14 All right. As long as you know these numbers.
15 Okay. So this remains as an item.

16 DR. MAURO: OTIB-0054 was
17 reviewed. I recall being involved in that
18 review. And it received a favorable review.
19 I believe it went before the procedures
20 workgroup.

21 It will be on the record in the
22 procedures workgroup, but I think that -- I

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1 remember when I read the original review
2 performed by Joyce Lipsztein, she found the
3 basic -- there were a couple of minor
4 findings, but, by and large, OTIB-0054 held up
5 pretty well if that helps out any.

6 MEMBER MUNN: We had a rather
7 extensive review in procedures.

8 DR. MAURO: Yes.

9 CHAIRMAN GRIFFON: And this
10 requires a comparison.

11 DR. MAURO: It requires, but I'm
12 just saying at least it --

13 CHAIRMAN GRIFFON: Right, right,
14 right. Okay.

15 DR. MAURO: Except that there is a
16 lot of controversy right now.

17 CHAIRMAN GRIFFON: Yes. All
18 right. It looks like not much yellow here for
19 a while. 135 is the next one I show, 135.1.
20 This is a remaining action item.

21 MR. SIEBERT: I think we have hit
22 the point where at the December meeting, we

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1 hadn't gotten this far into getting back into
2 the seventh set.

3 CHAIRMAN GRIFFON: Right, right,
4 right. Yes. This is probably just a
5 refresher at this point to see what is out
6 there. 135.4, follow-up on potential tritium
7 exposures. All right.

8 Well, this one, 136.3, this says
9 NIOSH is following up on this and the case is
10 being reviewed under PER review. I mean, I'm
11 trying to think what we've done. If it's
12 being reviewed in PER review --

13 MEMBER MUNN: That was a few
14 months ago, but it's still status? Is that
15 where it is still?

16 MR. HINNEFELD: Well, I don't
17 know. I'll have to go find out. Well, the
18 issue being reworked as --

19 CHAIRMAN GRIFFON: Exactly, yes.

20 MR. HINNEFELD: So that may
21 prevent us from going further on this.

22 CHAIRMAN GRIFFON: That's what I

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1 was wondering because most times in most of
2 the resolution I have, if it's under PER
3 review, we kind of note it, but we don't go
4 any further with it, you know. And then we're
5 going to say eventually we may want to look
6 back at some of those PER review cases, not
7 necessarily all of them but some of interest
8 or whatever.

9 MR. HINNEFELD: Right.

10 CHAIRMAN GRIFFON: Because when
11 you rework, as we all remember it, when you
12 rework the case for PER review, you also often
13 rework many aspects of the case, right?

14 MR. HINNEFELD: Yes.

15 CHAIRMAN GRIFFON: So it would be
16 a whole different thing. So my question is,
17 why is that phrased differently? It looks at
18 follow-up and PER review. Go ahead.

19 MR. SIEBERT: This is the issue of
20 Rocky Flats and what they sent us
21 documentation on their X-rays. That is coming
22 back to me.

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1 CHAIRMAN GRIFFON: Okay.

2 MR. SIEBERT: We've been dealing
3 with this, that in a TBD, it had basically
4 said the X-ray records may not be fully
5 complete, which gives the indication that they
6 may or may not be.

7 When we were getting records from
8 the Rocky Flats document people, we were
9 getting the paper medical records from them.
10 And when we were reviewing them, most of them
11 looked pretty much like they would be
12 complete.

13 In other words, you would see
14 either annuals or you would see every couple
15 of years. Nothing looked like there was
16 something missing. There weren't big, bulky
17 gaps in it.

18 So at that time, we were saying if
19 it looked like it was complete, we would go
20 with the record. We weren't sure we would go
21 with annuals. They went back to the TBD
22 saying that they may or may not be complete at

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1 that point.

2 We have looked into the situation
3 a little further and looking at the actual
4 films for some examples. And it looks like
5 the film record may be more complete than the
6 actual paper medical record that they were
7 sending to us.

8 So we are presently working with
9 the Rocky Flats folks as to how they're going
10 to send us the X-ray information so that we
11 know that we have all the information on the
12 X-rays.

13 MR. HINNEFELD: Yes. They're
14 going back. They've got the film. So they're
15 going back to check the films.

16 DR. MAURO: Any reason why you
17 didn't go to -- on so many occasions, I have
18 seen you resort to OTIB-006. It's the one
19 that's a generic approach for reconstructing
20 exposures from medical X-rays, when you use
21 look-up tables. We did a very detailed review
22 of it and found very favorably.

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1 Any reason why you don't go to
2 that?

3 MR. SIEBERT: We won't go to OTIB-
4 006 if we have a TBD. TBD would trump OTIB-
5 006 because it's site-specific information,
6 which was fitting in this case because the TBD
7 did clearly say that they may or may not be
8 fully complete. This is pretty much how we
9 applied that information and then went back
10 and looked at films and realized that it may
11 not be consistent.

12 MR. HINNEFELD: And we did have a
13 discussion when we found this when this issue
14 came alive. We did have a discussion about,
15 well, shall we just go with the default annual
16 or should we go try and get the record from
17 the film, the film record? We're not going to
18 get the films, but there is going to be a
19 record there, an actual film record.

20 And, for some reason, we decided
21 to go get the films. And, to be honest with
22 you, I don't remember why. We did talk about

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1 that at the time. And someone made a fairly
2 compelling argument that we ought to try to
3 look at the film.

4 It may even have been as much as
5 some of the cases that there were more than
6 one a year or something. It may have been.
7 I don't know if that was it. I don't know if
8 that was it.

9 But, for some reason, you know --
10 and I don't remember. Somebody made a
11 compelling argument we ought to go see what
12 those tell us. So that's what we are
13 pursuing.

14 So, I mean, with respect to that,
15 I mean, so other than the fact that it is in
16 PER, I mean, 136.3, at least for Rocky Flats
17 cases, you know, we kind of by pursuing the
18 more complete records feel like we have been
19 addressing 136.3.

20 Now, 136.4 poses an interesting
21 question.

22 CHAIRMAN GRIFFON: I guess that's

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1 my question.

2 MR. HINNEFELD: This case is being
3 PER reviewed.

4 CHAIRMAN GRIFFON: Right.

5 MR. HINNEFELD: But the version we
6 have in front of us is not. And we still have
7 this inconsistency about which solubility
8 class is better.

9 CHAIRMAN GRIFFON: Right.

10 MR. HINNEFELD: And there is an
11 agreement to trade IMBA runs. So I would
12 suggest that we maybe go ahead and do that.

13 CHAIRMAN GRIFFON: Yes. I think
14 we --

15 MR. FARVER: I did. I sent it to
16 you all --

17 MR. HINNEFELD: And we probably
18 have not sent you all our --

19 MR. FARVER: -- January 27th.

20 MR. SIEBERT: We actually have
21 runs. I see runs from August.

22 MR. HINNEFELD: Okay. So we will

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1 get to you our runs. We have yours.

2 CHAIRMAN GRIFFON: Let me go back
3 to 136.3 just for a second. Are we closing
4 that out or can we close that out? You said
5 that you're following up to see if -- I mean,
6 the original finding is that the CATI was
7 inconsistent with the actual X-rays that you
8 -- the extra frequency that you had in --

9 MR. HINNEFELD: Well, I guess if
10 you ask questions of CATI, it is going to be
11 consistent with the film record.

12 CHAIRMAN GRIFFON: Right, right.

13 MR. HINNEFELD: And so I don't
14 know what exactly CATI says. Maybe it says
15 annual X-rays or something. I guess my view
16 of when you ask somebody 20 years after the
17 fact "How often did you have X-rays?" they
18 will remember, "Well, we went every year and
19 had X-rays."

20 MR. FARVER: Well, it's not
21 consistent with the CATI or the TBD.

22 MR. HINNEFELD: Okay. And the

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1 fact of that --

2 MR. SIEBERT: And then that was
3 the reading of the TBD where you interpreted
4 it as saying it may be incomplete, so always
5 really should assume annual versus we were
6 reading it as it may be incomplete, so look at
7 the record and see if it appears like it would
8 be complete. That was the different way of
9 interpreting what was written in the TBD.

10 MR. FARVER: Correct.

11 CHAIRMAN GRIFFON: So I guess my
12 question is, do I leave this open until you go
13 back? You're going back to the site to ask
14 for these records, the things --

15 MR. HINNEFELD: Yes, or wherever
16 they store the records there. This is --

17 MR. FARVER: Because it says it is
18 not reliable to count the records. The
19 medical files do not always document each
20 X-ray taken.

21 MR. HINNEFELD: It said it right
22 in --

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1 CHAIRMAN GRIFFON: Right, right.

2 MR. FARVER: Well, if you can't
3 rely on it, then I would guess you would
4 assume anyway.

5 MR. SIEBERT: Or go to the actual
6 films of what we're truly doing.

7 CHAIRMAN GRIFFON: Which is what
8 you are doing now. But that is like a
9 follow-up action, really.

10 MR. SIEBERT: Yes, right.

11 CHAIRMAN GRIFFON: So I don't want
12 to close it out until, you know -- I will
13 leave that as --

14 MR. SIEBERT: What are you looking
15 for from us?

16 MR. HINNEFELD: You just want a
17 report while we have it?

18 CHAIRMAN GRIFFON: Yes, just a
19 report. Yes.

20 MR. SIEBERT: Which is what we are
21 intending to do.

22 CHAIRMAN GRIFFON: Yes. When you

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1 went back and found the films, what did you
2 find out, too, compared to the original
3 assumptions? Yes.

4 MR. SIEBERT: I think I have that
5 information.

6 CHAIRMAN GRIFFON: Right.

7 MR. FARVER: I guess for future
8 cases, you would consider if there is
9 conflicting information in the CATI report for
10 Rocky Flats anyway. It should get kicked back
11 to go look for if it's POC or something --

12 MR. HINNEFELD: We are getting all
13 of those things.

14 CHAIRMAN GRIFFON: You are? Okay.

15 MR. HINNEFELD: We are getting all
16 of them, I mean, claim, all the claim ones, --

17 CHAIRMAN GRIFFON: Right.

18 MR. HINNEFELD: -- not all of them
19 but the claim ones.

20 CHAIRMAN GRIFFON: Okay. Now, the
21 other two I agree with you, Stu, that we
22 should leave them all. But even though it's

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1 a PER review, we should look at the sheer IMBA
2 runs on this. That's 136.4 and .5.

3 Anything else on that?

4 DR. MAURO: Well, I will just ask
5 a question. I haven't seen this kind of
6 attention before to the film. It sounds like
7 a case difference may make a difference. In
8 other words, for you folks to be putting this
9 much attention --

10 MR. SIEBERT: Now, I don't believe
11 this makes any difference whatsoever, but
12 since the TBD was written the way it was and
13 the way we interpreted it, we wanted to
14 basically go back and figure out, Okay. What
15 is really the right interpretation of reading
16 it? So we went back and actually requested
17 the films. That's why we went into that
18 depth.

19 MR. HINNEFELD: Yes. The first
20 thing we actually did was we went and looked
21 at like nine and just said, "Okay. Here are
22 nine claims. Pull these out, these nine,"

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1 claiming that the actual film record be done
2 compared to the medical record we got. I
3 don't think any of them --

4 CHAIRMAN GRIFFON: Right.

5 MR. HINNEFELD: I don't know if
6 any of them --

7 MR. SIEBERT: And it was
8 inconsistencies between both sides.

9 MR. HINNEFELD: And so based on
10 that, we said --

11 CHAIRMAN GRIFFON: You had better
12 just get them off.

13 MR. HINNEFELD: Yes.

14 CHAIRMAN GRIFFON: Okay.

15 MR. FARVER: Just a little bit of
16 discussion on 136.5. This is where I believe
17 the employee mentions that there were fires in
18 one of the buildings in the CATI report. He
19 worked in the building that caught fire, 444.
20 Okay.

21 And when you look at the DR report
22 that talks about the CATI information, main

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1 fires at Rocky Flats occurred before the
2 employee's employment. However, it will
3 account for any small fires that may be
4 involved in the assumption of insoluble
5 material was assumed.

6 That refers to plutonium. The
7 building 444 is a beryllium/uranium building.
8 So this goes back to support the type S
9 uranium.

10 MR. SIEBERT: Right. And I think
11 that there were two issues. Initially in the
12 dose reconstruction report, we referred to the
13 work in 776, the plutonium areas, versus 404
14 or 444, which we agree we should have written
15 the 444 for the uranium. But this is the same
16 thing as the previous one in that --

17 MR. FARVER: Sure.

18 MR. SIEBERT: -- I believe the
19 Type S was not claimant-favorable, a more
20 soluble form based on latency of -- we need to
21 trade the --

22 MR. FARVER: Can relate to each

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1 other, yes.

2 MR. SIEBERT: In IMBA.

3 CHAIRMAN GRIFFON: Okay. I am on
4 down to 137.4. I don't really see a clear
5 action there as I wrote it. Which site is
6 this on?

7 MR. FARVER: This is Paducah.

8 CHAIRMAN GRIFFON: Paducah, yes.
9 So I guess part of it is OTIB 17, but part of
10 it is the case-specific question of
11 contamination at the location or radionuclide,
12 I guess.

13 MR. FARVER: According to their
14 TBD for Paducah, it states "Some skin
15 contamination events involving tech-99 could
16 have occurred without being detected at the
17 time.

18 "In some cases, therefore, it
19 could be appropriate to consider an additional
20 skin dose component for a reported shallow
21 dose of a worker who could have had direct
22 contact with Tc-99. In the absence specific

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1 data, the dose reconstructor must make
2 assumptions about the number of times per year
3 on the effect of the skin region that could
4 have been contaminated and the extent of each
5 contamination."

6 And basically what we point out is
7 the buildings that he worked in. There was
8 Tc-99. There was thorium. And he had the
9 potential for low energy beta radiation. So
10 we feel that he should have considered a
11 shallow skin dose growth.

12 DR. MAURO: And it appears that
13 NIOSH agreed with that.

14 CHAIRMAN GRIFFON: Yes, the bottom
15 of your response. It should have been
16 included.

17 MR. HINNEFELD: That's interesting
18 because I don't know that I much agree with
19 that. Here is the situation. Here is what
20 concerns me about that. You are suggesting
21 assigning a skin dose component for a
22 contamination event that we have no evidence

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1 at all.

2 CHAIRMAN GRIFFON: Right. But I
3 am wondering how you are going to do that.

4 MR. HINNEFELD: Okay. I am really
5 at a loss for how to do that because if you
6 are going to assume a contamination event, why
7 not assume several? Why not assume whatever
8 level you want for as long as you want every
9 day until you wash it off or you didn't take
10 a bath until you just compensated? I mean, I
11 don't know if you've ever got -- but for a lot
12 of cases you could.

13 So my concern is a practical
14 matter here. If you have no evidence of it,
15 how in the world do you deal with it? Because
16 you essentially are speculating its existence.
17 And once you have done that, you could have a
18 reasonable amount that you put on there for
19 the entire work period.

20 MR. FARVER: But I believe it was
21 monitored internally for tech-99.

22 MR. HINNEFELD: Well, I mean, you

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1 will run into a situation everywhere.

2 MR. FARVER: Oh, I understand
3 that. So how many --

4 MR. HINNEFELD: It's not only a
5 tech-99 issue. I mean, this will go any place
6 that has unconfined --

7 MR. FARVER: I mean, I see the
8 problem from an implementation point of view.
9 I also see it from looking at, well, yes, it
10 could have.

11 MR. HINNEFELD: Correct.

12 MR. FARVER: And the way the
13 documentation is currently written, it says it
14 could be appropriate to consider a skin dose
15 component.

16 MR. HINNEFELD: I just don't know
17 a way to do it.

18 DR. MAURO: We run into this time
19 and again. At the Nevada test site, this
20 issue came up. And the discussion goes there
21 are certain sites where the potential for skin
22 contamination, it's clear that it exists.

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1 This might be one of those sites.

2 Then under those circumstances, I
3 know we talked. All right. So let's say we
4 have a circumstance. And now a person goes
5 into a controlled access area. He's suited
6 up.

7 In some cases, he's suited up to
8 the point where he's completely covered. And
9 so, therefore, the potential for him to have
10 experienced a direct deposition skin
11 contamination is extremely small.

12 And that was one of the answers
13 given for Nevada test site, that there was
14 access to controls. The person was totally
15 covered. But there are also circumstances
16 where that is not the case, where there is
17 evidence that the person was not fully
18 covered. He could have gotten some
19 contamination on the face, skin, hand area,
20 uncovered areas. And there was a very real
21 potential for that kind of contamination.

22 That was, by the way, one of the

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1 concerns with OTIB 17. All right? Because
2 you remember everything that you do in OTIB 17
3 is based on the non-penetrating exposure as
4 read out on the film badge as if any kind of
5 non-penetrating exposure was at a distance, no
6 consideration given to those unusual
7 circumstances.

8 Now, one of the arguments given is
9 that, notwithstanding even if he was
10 uncovered, he goes through an access and
11 egress control point, where we scan. And if
12 there is any contamination, it would be picked
13 up and washed off.

14 And I think we left it as I think
15 unresolved, namely is that good enough.

16 MR. HINNEFELD: Well, if we want
17 to pursue this, I'm just going to suggest this
18 has to go on the over-arching issues because
19 this is an issue that will -- I worked at
20 Fernald in the 1980s. I hear exactly what you
21 are talking about. And so I know exactly what
22 you are talking about.

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1 There was a period at Fernald when
2 there were no contamination monitors. Before
3 you went home, you were required to shower
4 before you went home.

5 But there were no contamination
6 monitors. You don't know if he first got in
7 the shower contaminated. You don't know if he
8 got out clean.

9 So I understand exactly the point.

10 CHAIRMAN GRIFFON: Yes.

11 MR. HINNEFELD: I am just trying
12 to say that sitting here today, I don't even
13 know what I would do about that.

14 MR. FARVER: You know, I am
15 looking back further here at the job
16 description, what the employee did. There's
17 a groundskeeper for a certain time. And then
18 he was mechanical maintenance. So he did some
19 mowing in the cylinder yards, also
20 sandblasting cylinders, wetting down roofs or
21 buildings and grinding them up and putting new
22 roofs on buildings. So maybe you can narrow

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1 it down to a time period.

2 MR. HINNEFELD: But even then, I
3 mean, you can. You might be able to bound the
4 case. I just think it's universal.

5 MR. FARVER: Oh, it is. It's
6 definitely universal.

7 DR. MAURO: Absolutely.

8 MR. HINNEFELD: Maybe the program
9 needs to come to grips with dealing with that
10 because, by the way, the roofs at Fernald were
11 not good either. It was just a tar roof, but
12 apparently it attracted further contamination.

13 MR. FARVER: Go out and weld cells
14 about once a week in various process buildings
15 on the cell floor.

16 CHAIRMAN GRIFFON: And the other
17 thing, different from John's example, I think,
18 is that in Paducah, we know that they weren't
19 always all covered, you know? I mean --

20 MR. HINNEFELD: Or at Fernald,
21 right.

22 CHAIRMAN GRIFFON: Or at Fernald.

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1 MR. HINNEFELD: The experience my
2 career has --

3 CHAIRMAN GRIFFON: Yes.

4 MR. HINNEFELD: I understand
5 exactly what you are talking about.

6 CHAIRMAN GRIFFON: How to quantify
7 it is the problem. Yes, yes. I listed it as
8 a NIOSH needs to consider this as an
9 over-arching issue.

10 MEMBER MUNN: I am continually
11 making assumptions that each and every
12 individual who is in the area of specific
13 radionuclides, like tech, when they are badged
14 and you have material from which to work in
15 making a plausible scientific assessment of
16 what their exposure was, it's foolish to make
17 the assumption that every individual had every
18 type of exposure that would be possible. How
19 would you come to the conclusion that that was
20 a legitimate thing to do?

21 MR. HINNEFELD: Well, by putting
22 it as an over-arching issues, I will let Dr.

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1 Neton worry about that.

2 CHAIRMAN GRIFFON: No. I don't
3 think anybody disagrees with that one. I
4 mean, it's just how these determine for, you
5 know, there has got to be some sort of --

6 MEMBER MUNN: Well, there needs to
7 be some evidence.

8 CHAIRMAN GRIFFON: I think there
9 was some evidence.

10 MR. FARVER: If you go back to
11 where what the job functions were, you know,
12 cutting and welding on a process floor might
13 be a good indicator. Mowing probably isn't.

14 CHAIRMAN GRIFFON: Yes.

15 MR. HINNEFELD: Interesting
16 debate. It will be an interesting debate.

17 MR. FARVER: Yes.

18 CHAIRMAN GRIFFON: I am not sure
19 there is much to debate about. I am not sure
20 there is much to debate about, but it will be
21 an interesting discussion.

22 MEMBER MUNN: So where are you

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1 with respect to this finding? What do we do
2 about that?

3 CHAIRMAN GRIFFON: Well, I put it
4 on NIOSH will consider this as an over-arching
5 issue, white paper idea, I guess, you know,
6 white paper concept. I am not sure how it
7 affects this individual finding for this case.
8 I mean, that's --

9 DR. MAURO: He is a skin cancer
10 case?

11 MR. FARVER: Yes.

12 MR. HINNEFELD: It has to be.
13 Otherwise it wouldn't be here.

14 CHAIRMAN GRIFFON: Yes. Otherwise
15 it's not even a concern. Yes.

16 DR. MAURO: And we are talking
17 about uranium?

18 MR. HINNEFELD: It's Paducah. So
19 it will be some potential for --

20 CHAIRMAN GRIFFON: Yes, uranium,
21 thorium.

22 MR. HINNEFELD: But they have tech

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1 there as well.

2 CHAIRMAN GRIFFON: Right.

3 MR. HINNEFELD: Paducah is
4 probably locked in with Fernald.

5 DR. MAURO: You have a particle of
6 any -- say you've got a cancer of the neck.

7 CHAIRMAN GRIFFON: Right.

8 DR. MAURO: You could say, "Okay.
9 We know the" --

10 MR. HINNEFELD: What kind of
11 particle?

12 DR. MAURO: What's that?

13 MR. HINNEFELD: What kind of
14 particle would get cleaned off?

15 DR. MAURO: I don't know, but --

16 MR. HINNEFELD: It would happen
17 again and again.

18 CHAIRMAN GRIFFON: Yes, I know.

19 DR. MAURO: If it was me, what
20 would I do if it was me? I said, "Wait a
21 minute. Wait a minute." I would say, "Let me
22 make an assumption that some particle is

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1 sitting on my neck for eight hours before I
2 took a shower. And I will run the skin."

3 What is that, VARSKIN? Run over
4 there, and I will see what the dose was for
5 that little spot. That's what I would do if
6 it was me. I would want to know.

7 MR. HINNEFELD: Call Jim.

8 CHAIRMAN GRIFFON: Maybe as a
9 starting "What if?" Yes. Okay. 137.6, then,
10 is the next one. And I have "NIOSH to follow
11 up on this case." This is a solubility
12 assumption.

13 And that holds for the next two
14 also, NIOSH to follow up on .7 and .8 as well.
15 So it's fission products and then the CATI
16 incidents reported question.

17 MR. HINNEFELD: This is a Paducah
18 case. Is that right?

19 CHAIRMAN GRIFFON: Yes, yes.

20 MR. HINNEFELD: I think, well, we
21 will get you more on it. I think they used
22 the Y-12 mobile counter at Paducah, right?

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1 CHAIRMAN GRIFFON: Yes.

2 MR. HINNEFELD: It just spit out
3 radionuclides. You know, since it spit out
4 Cesium-137, that didn't mean they were looking
5 for Cesium-137. So any kind of a fission
6 product contribution from Paducah would be
7 from recycled uranium content. So it ought to
8 be addressed to that.

9 I don't think you would want to
10 interpret a printout from the mobile counter
11 as including things like Cesium-137. There
12 may have been some other stuff on it, too, as
13 meaning that there were indications that
14 really needed to be monitored for it. I think
15 the intake would have to be based on the
16 recycled uranium conclusions.

17 CHAIRMAN GRIFFON: I mean, I think
18 you're right. I mean, that sounds logical,
19 but you want to check.

20 MR. HINNEFELD: Yes. I can go
21 chase this down some more.

22 MR. FARVER: Yes. I mean,

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1 basically we are just saying you didn't
2 consider fission products. We're not really
3 saying it's from whole body count. We're
4 saying we have in vivo and in vitro.

5 CHAIRMAN GRIFFON: Yes.

6 MR. FARVER: Cover both.

7 MR. HINNEFELD: It's a really bad
8 day when they have some fission in Paducah.
9 It's a really bad day.

10 CHAIRMAN GRIFFON: Right. All
11 right. So I propose that we stop here. I
12 thought I was going to get through the whole
13 matrix. We almost made it, but it's a good
14 time to break for lunch.

15 We're at a new case here, 138.
16 Why don't we pick it up and give ourselves and
17 hour for lunch and reconvene at 1:00 o'clock
18 our time, Wanda? Is that all right?

19 MEMBER MUNN: That will be fine.
20 All right. With many mea culpas, I have to
21 tell you that I appear to have done something
22 really bad to my data files when I shut down

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1 yesterday after our teleconference yesterday.

2 And I am not sure I am going to be
3 able to retrieve my Board files. They seem to
4 be pretty well trashed or hidden somewhere
5 that I can't get to them.

6 So the material that we are going
7 to cover this evening, this afternoon, when
8 John joins us is probably not going to be
9 easily retrievable for me either. If someone
10 has that easily available that could --

11 CHAIRMAN GRIFFON: We'll get that
12 case report sent to you.

13 MEMBER MUNN: I really appreciate
14 that.

15 CHAIRMAN GRIFFON: Do you need the
16 eighth set of cases, too?

17 MEMBER MUNN: Apparently I do.

18 CHAIRMAN GRIFFON: All right.

19 MEMBER MUNN: I am unable to
20 resurrect any of the Board files.

21 CHAIRMAN GRIFFON: We will get
22 those e-mailed to you.

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1 MEMBER MUNN: I have no idea where
2 my Board files are.

3 CHAIRMAN GRIFFON: Okay. It's
4 going to be two files. We'll send them to you
5 from one of us. I'm not sure.

6 MEMBER MUNN: I very much
7 appreciate it.

8 CHAIRMAN GRIFFON: Okay, Wanda.

9 MEMBER MUNN: Thank you.

10 CHAIRMAN GRIFFON: All right. Bye
11 bye.

12 MR. KATZ: Okay. I am
13 disconnecting the phone.

14 (Whereupon, the above-entitled
15 matter went off the record at 12:04 p.m. and
16 resumed at 1:03 p.m.)

17

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1 A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

2 (1:03 p.m.)

3 MR. KATZ: Hello. This is Ted
4 Katz with the Advisory Board of Radiation
5 Worker Health. And this is the Subcommittee
6 on Dose Reconstruction Review. We are about
7 to get started again, having broken for lunch.

8 I just want to check first for
9 Board members on the phone. Wanda, have you
10 rejoined us?

11 MEMBER MUNN: I have. Thank you
12 for sending me the necessary files.

13 MR. KATZ: You're welcome. And,
14 Dr. Poston, are you with us, too? John?

15 CHAIRMAN GRIFFON: Not yet. Well,
16 maybe he will be by the time we get to --

17 MR. KATZ: Not yet. Right. Do we
18 need to check on anyone else? Do you need to
19 know from SC&A?

20 DR. MAURO: No. We are fine.

21 CHAIRMAN GRIFFON: Okay. I would
22 like to wrap up the seventh set. We are

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1 almost to the end of the seventh set of cases.
2 So I figure we will wrap that up. And then we
3 will go into the other piece, the first
4 100-day report.

5 We left off on case number 138.
6 Actually, I see nothing on that one. This can
7 be quick.

8 Okay. One forty-three is actually
9 the next place I have where I see NIOSH to
10 follow up on this case, whether or not we
11 received all available dosimetry data. That
12 was sort of the finding. I guess if I don't
13 hear anything else, I will assume that is --

14 MR. HINNEFELD: Yes. We can give
15 it a try. I mean, generally when we go back
16 to DOE about things like this, we send you
17 what we've got.

18 CHAIRMAN GRIFFON: Send me what
19 you have, yes.

20 MR. HINNEFELD: I mean, we can
21 ask.

22 CHAIRMAN GRIFFON: Right. Why

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1 does it come up in this particular case to
2 remind us? Doug, I know we have been through
3 this before, but --

4 MR. FARVER: I'll find it real
5 quick.

6 CHAIRMAN GRIFFON: There must be
7 something that --

8 MR. FARVER: Yes, because it was
9 something in the CATI report.

10 CHAIRMAN GRIFFON: Yes.

11 MR. FARVER: Now, is the correct
12 finding 143.1?

13 CHAIRMAN GRIFFON: Yes.

14 MR. FARVER: 143.1. Okay. It has
15 to do with the CATI report. We're in the EE
16 routine radiation, dosimeter badges. And the
17 claimant has copies of the employee's
18 dosimetry records.

19 The DR report doesn't mention
20 anything about this. So SC&A is questioning
21 whether the dosimetry records were requested
22 from the claimant and any additional ones from

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1 DOE.

2 So part of this is whether the
3 check box in the CATI report when the claimant
4 says, "Yes, we have additional records." Do
5 those records get requested? And the other
6 concern --

7 CHAIRMAN GRIFFON: Do you mean the
8 individual said they had additional records?

9 MR. FARVER: Correct. Well,
10 that's one part of it.

11 MR. HINNEFELD: Just so
12 everybody's expectation is the same here, I
13 mean, this is a claim that was adjudicated a
14 long time ago. So this claimant would not
15 have been -- unless there were cases we opened
16 for some reason, it would not have been a
17 communication with the government about this
18 claim for a long time.

19 MR. SIEBERT: Pulled.

20 MR. HINNEFELD: Pulled?

21 MEMBER MUNN: Stu, I can hardly
22 hear you again.

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1 MR. HINNEFELD: Okay. Well, Scott
2 advises me that this case has been pulled for
3 SEC. Apparently this person's employment is
4 in the Los Alamos. It's a LANL case. It was
5 in the LANL SEC period. And so it looks to us
6 as if it's going to be concentrated in that.

7 Just in the instance of this, we
8 don't make it a practice to go back to
9 claimants on these cases that the Board is
10 reviewing that have been adjudicated long ago,
11 for instance, in this case where they said
12 they had more records. We just feel like they
13 ought not to reopen the --

14 CHAIRMAN GRIFFON: You want to
15 make new communications with them and get any
16 --

17 MR. HINNEFELD: Yes. Why reopen
18 the --

19 CHAIRMAN GRIFFON: Right, right.

20 MR. HINNEFELD: -- closing since
21 they got their adjudication answer. And so we
22 wouldn't go back. Now, we could do additional

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1 searching, you know.

2 MR. FARVER: No. But, I mean,
3 when someone marks that in their CATI
4 interview --

5 MR. HINNEFELD: In our response,
6 we did say, "Well, there are a lot of medical
7 records in the DOL file." And so it could be
8 that she has boxes of medical records but
9 nothing additional on the dosimetry.

10 CHAIRMAN GRIFFON: But I think in
11 this case you didn't go back to the individual
12 probably. That's --

13 MR. HINNEFELD: Really, by the
14 time the Board reviews it, unless this case is
15 back and active again, I don't think we --

16 CHAIRMAN GRIFFON: No, no, no, no.

17 MR. HINNEFELD: Oh, you mean at
18 the time we would do it?

19 CHAIRMAN GRIFFON: At the time you
20 did it.

21 MR. HINNEFELD: No. I'll bet we
22 probably do not. I'll bet we probably do not.

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1 CHAIRMAN GRIFFON: I guess that
2 would be more --

3 MR. HINNEFELD: We concluded that
4 she was referring to the medical records and
5 review at the time we did the dose. That was
6 probably our conclusion at the time.

7 CHAIRMAN GRIFFON: That is kind of
8 an assumption.

9 MR. SIEBERT: But you would have
10 had the opportunity during the close of that
11 interview to say that that was unacceptable to
12 her and said she had more records --

13 MR. HINNEFELD: Yes.

14 MR. SIEBERT: -- and could have
15 sent them in, too.

16 MR. HINNEFELD: So, I mean, we can
17 go back to LANL, you know. LANL has been a
18 bit of a problem child sometimes with records.
19 And so, you know, we can see if there is
20 anything else there. We can check back with
21 our own research. Maybe we have discovered
22 that things really weren't that good back in

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1 those days or we don't have any --

2 CHAIRMAN GRIFFON: its being
3 pulled for SEC anyway.

4 MR. HINNEFELD: Yes. I mean, it
5 is not a bad claim. I just think it is just
6 for general reference.

7 MR. FARVER: That was part of it.
8 The claimant said there were additional
9 records. In this case, the employee worked
10 there from '46 through '90 or '91. It's a
11 long time period. And there are only three
12 years of exposure data: '56, '57, and '64.

13 That is probably what keyed it up
14 to us there so that there might be additional
15 records, if you worked there that long and you
16 just have three years of monitoring data.

17 CHAIRMAN GRIFFON: Yes, right.
18 Yes.

19 MEMBER MUNN: So the real bottom
20 line here is did we have adequate records to
21 do the job that was necessary to be done? And
22 that is to say, does what we have constitute

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1 adequate information?

2 This is not additional needed
3 information or was it not? That is the
4 question that seems --

5 MR. FARVER: Well, I can't tell
6 you it was adequate because you only have
7 three years of monitoring data. And then they
8 only assign three years of missed dose data
9 based on those three years of monitoring data.
10 So I am not sure that is adequate.

11 CHAIRMAN GRIFFON: I think the
12 real bottom line is it's likely to be in the
13 SEC, right?

14 MR. HINNEFELD: Yes. I mean, that
15 may be, you know, the reason for it. But yes,
16 this case is in the SEC. I think that, Wanda,
17 to answer your question, did we have adequate
18 records, it depends on we should have had more
19 or not.

20 If the person was only monitored
21 for three years, then we had all of the
22 records. If the person was in a fairly

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1 unexposed job or pretty much unexposed job for
2 their careers, then we had adequate records.

3 But if this person was for a while
4 in jobs where they had a relatively high
5 exposure, especially for long years, I mean,
6 they worked there a long time and those
7 records weren't made available to us, well,
8 then, arguably, we didn't have adequate
9 records.

10 So, you know, you can't really
11 answer the question were these records
12 adequate without knowing if there is still in
13 them.

14 MR. FARVER: Correct. And if you
15 go back even to the job descriptions, well,
16 janitor, lab associate, technician, prototype
17 machinist, casting machinist, so yes or no.

18 MR. HINNEFELD: Yes.

19 CHAIRMAN GRIFFON: Yes.

20 MEMBER MUNN: I'm thinking in
21 terms of the closure of the file itself when
22 I really should see if we have adequate

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1 records to complete what needed to be done.

2 MR. HINNEFELD: Well, in this case
3 the judgment was made that the Los Alamos
4 records are of sufficient quality that had he
5 been monitored, we would have had more
6 records.

7 MEMBER MUNN: Right.

8 MR. HINNEFELD: That was the tacit
9 assumption that was dose reconstruction
10 because when a person didn't have a monitoring
11 record, they were assigned the ambient dose,
12 which means that they were essentially a
13 non-exposed person. They just worked on the
14 site.

15 MEMBER MUNN: Right.

16 MR. HINNEFELD: So that was the
17 assumption in this. And whether or not that
18 was a good assumption or not would depend on
19 whether our understanding of the Los Alamos
20 record system is correct or the one we had at
21 that time.

22 I can check to see if it has

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1 changed. I mean, we could go back to Los
2 Alamos and with the general question about,
3 are we sure, are you sure we are getting all
4 of these exposure records. But in terms of a
5 follow-up, I don't know if there is going to
6 be anything terribly satisfying. We normally
7 go back to a DOE site.

8 MEMBER MUNN: But in any case, did
9 I hear correctly that this now falls into an
10 SEC?

11 MR. HINNEFELD: Yes, that is the
12 case.

13 CHAIRMAN GRIFFON: Does it fall
14 into or it's being assessed to determine?

15 MR. HINNEFELD: It is our judgment
16 that it will. It is on that list because they
17 have employment in the covered period and they
18 have what appears to us to be SEC cancer.

19 MEMBER MUNN: I see.

20 MR. HINNEFELD: So that's why they
21 end up that full category. That's what puts
22 them in that.

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1 CHAIRMAN GRIFFON: Okay.

2 MR. HINNEFELD: So, now, on that
3 one, I said we would see what we can find out
4 if there is a way to find out any more. That
5 is actually several of the 143 findings fall
6 in that category, right?

7 CHAIRMAN GRIFFON: Yes, but I was
8 just going to say, if I can use that last bit
9 you just said, I don't feel that there is any
10 further action on this case.

11 MR. HINNEFELD: That is even
12 better.

13 CHAIRMAN GRIFFON: I mean, we will
14 just say that it's no further action in this
15 case since it appears -- I want to know how to
16 phrase this -- to fall under the SEC class.

17 MR. HINNEFELD: Yes, yes.

18 CHAIRMAN GRIFFON: I haven't
19 looked at the other couple of findings, but it
20 may be that that applies as well, you know.
21 We're talking about 143.5 and .6.

22 One is related to receiving all

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1 the velocity of the other. I think the same
2 thing would be applicable here, right?

3 MR. FARVER: Yes.

4 CHAIRMAN GRIFFON: And the other
5 one is really the CATI. Yes. So I think it
6 still applies, right?

7 MR. FARVER: Yes.

8 CHAIRMAN GRIFFON: So we'll close.
9 I think we'll close this case out because it
10 falls under the SEC.

11 MEMBER MUNN: Some of the closures
12 of some of the earlier items on that
13 particular case were closed, saying that that
14 badging policy is to be reviewed in site
15 profile review, another one of those things
16 where the action goes somewhere else.

17 MR. KATZ: Wanda, it's hard to
18 hear you. Maybe you could pick up the --

19 MEMBER MUNN: Maybe I am just
20 speaking too softly because --

21 MR. KATZ: Oh, maybe.

22 MEMBER MUNN: -- I do have my

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1 handset in my hand.

2 CHAIRMAN GRIFFON: That's better.

3 MEMBER MUNN: I was raising a
4 question with respect to the badging policy to
5 be reviewed in the site profile review --

6 CHAIRMAN GRIFFON: Yes.

7 MEMBER MUNN: -- for item 2 and
8 item 3 of that particular case and was
9 commenting that this is another one of those
10 things where the action goes somewhere else
11 and it's not clear how that particular item in
12 this matrix gets its final stamp of closed.

13 CHAIRMAN GRIFFON: Well, for this
14 case, since it's an SEC, the case would be
15 closed anyway. But I understand what you're
16 saying in general you refer to a site profile
17 review.

18 MEMBER MUNN: Yes. It's not
19 necessarily this case but --

20 CHAIRMAN GRIFFON: Usually it
21 stays open, yes.

22 MEMBER MUNN: -- overall have we

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1 finally wrestled that to the ground how we are
2 going to "write closed" in the final column?

3 CHAIRMAN GRIFFON: I don't think
4 we have any further than the procedures
5 workgroup has. I mean, I think it's the same
6 scenario that we -- the procedures
7 subcommittee will have the same kind of thing.

8 I mean, we just have to be able to
9 track all of these matrices --

10 MEMBER MUNN: Yes. Well, it --

11 CHAIRMAN GRIFFON: -- across our
12 Board work, you know? Yes.

13 MEMBER MUNN: Yes.

14 CHAIRMAN GRIFFON: So this is
15 getting referred to the LANL site profile
16 review, which I guess I am involved with. And
17 we just have to make sure it doesn't get lost.
18 Yes, I know what you are saying.

19 MEMBER MUNN: Yes.

20 CHAIRMAN GRIFFON: Yes. We are
21 going to do that in the data. John just
22 talked to me before the meeting started this

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1 morning that I have to get in touch with Kathy
2 and probably Doug and work a little more.
3 They have a beta version of a database similar
4 to the procedures subcommittee database. And
5 I think they have even uploaded most of the
6 past data on that.

7 DR. MAURO: We've been working on
8 it.

9 CHAIRMAN GRIFFON: Yes. So, you
10 know, we are probably ready to -- that will
11 help us in tracking these kinds of -- and
12 being able to query and see what is hanging
13 out there and what has been transferred where
14 --

15 MEMBER MUNN: Good.

16 CHAIRMAN GRIFFON: -- and so
17 forth. So yes, yes. So will use matrices in
18 the meetings and the database for tracking .
19 Anyway, we'll talk more about that.

20 MEMBER MUNN: That's good.

21 CHAIRMAN GRIFFON: Yes.

22 DR. MAURO: Is Kathy Behling on

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1 the line?

2 MS. BEHLING: Yes, I am on the
3 line.

4 DR. MAURO: Kathy, as a little
5 update, how do things stand with Don Loomis
6 loading the data into the database? Are we
7 making some progress there?

8 MS. BEHLING: We've made a lot of
9 progress. And I had hoped to get the database
10 into Mark's hands before this meeting, but
11 when I looked, in fact, Don has loaded the
12 first five sets onto the database. I'm still
13 reviewing some of that.

14 The one thing that has been added
15 to this database that is not included in the
16 procedures database is some statistics tabs.
17 And that hopefully is going to help the Board
18 with their selection process. They will be
19 able to go to that tab and see just what
20 facilities we have already picked cases from
21 and what types of cancer and so on and so
22 forth as you looked at now.

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1 We are still working on the
2 facility portion of that statistics tab. And
3 that is really the last thing that needs to be
4 done before I turn it over to Mark and he can
5 look over it and see what he thinks about it.

6 Hopefully by the next meeting we
7 can be up and running with that.

8 MEMBER MUNN: That will be really
9 helpful, Kathy.

10 MS. BEHLING: Okay.

11 CHAIRMAN GRIFFON: All right. So,
12 then, 143.5 and .6 are a similar outcome as
13 143.1. So I am moving on to 144.1. I have
14 asked SC&A to review the case.

15 MR. FARVER: I've reviewed it, and
16 their response is correct. In other words, we
17 actually agree.

18 CHAIRMAN GRIFFON: Right.

19 MEMBER MUNN: That's wonderful.

20 MR. FARVER: Mark that down.

21 CHAIRMAN GRIFFON: It's good to
22 close out some. Can you tell us a little bit

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1 about the why?

2 MR. FARVER: It has to do with the
3 calculation of shallow dose for -- let's see.

4 MR. SIEBERT: For missed dose.

5 MR. FARVER: Missed dose?

6 MR. SIEBERT: Yes. It's all
7 missed dose --

8 MR. FARVER: Missed dose.

9 MR. SIEBERT: -- assigned as
10 photon. And there was no electron, but that's
11 because it was all missed dose related to 17
12 that way.

13 MR. FARVER: Yes. It has to do
14 with counting the zeroes. And if it's a zero
15 shallow and a zero deep, you do one thing.
16 And it's the different combination of the
17 zeros and the positives. And it's all spelled
18 out in OTIB 17 pretty well.

19 MEMBER MUNN: So SC&A accepts
20 NIOSH's explanation? Case closed.

21 MR. FARVER: Case closed.

22 CHAIRMAN GRIFFON: Okay. 144.2.

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1 NIOSH has an action here on these.

2 MR. HINNEFELD: I've got nothing
3 new to provide today.

4 CHAIRMAN GRIFFON: Okay.

5 MR. HINNEFELD: I'll see if I
6 can't get some of this stuff before next
7 meeting. We're meeting again next month,
8 right?

9 CHAIRMAN GRIFFON: Yes.

10 MR. HINNEFELD: I'll see if I
11 can't get some of this stuff.

12 CHAIRMAN GRIFFON: It will be good
13 to close the sixth and the seventh if we can.

14 MR. HINNEFELD: Yes. We will try
15 to focus on those.

16 CHAIRMAN GRIFFON: We are pretty
17 close, I think.

18 MR. FARVER: Yes. That one
19 concerns, really, the ambient intakes for dose
20 rates and which table you chose, I believe.

21 MR. HINNEFELD: Yes. That sounds
22 right.

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1 MR. FARVER: I'm not going through
2 the --

3 MR. HINNEFELD: There's one where
4 there's like a max table and --

5 MR. SIEBERT: There is a max
6 column. And yes, there's the different TAs.
7 And there's a max column, yes. There's --

8 MR. HINNEFELD: For certain years,
9 the max is smaller than one or two of the TAs.

10 MR. SIEBERT: Than one of the TAs,
11 yes.

12 MR. FARVER: There are different
13 tables with different columns. And it's hard
14 to tell which table was used.

15 CHAIRMAN GRIFFON: Okay. And
16 that's the end of this seventh matrix. I'm
17 just cleaning up a few things before I save
18 and close it.

19 MEMBER MUNN: So there's no change
20 on that on 144.2?

21 CHAIRMAN GRIFFON: No. That's a
22 remaining action for NIOSH.

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1 MEMBER MUNN: Okay.

2 CHAIRMAN GRIFFON: Okay. The next
3 topic on the agenda is a discussion of this
4 first 100-day -- or first 100 cases. First
5 100 days. I'm thinking of Obama.

6 MR. KATZ: Obama.

7 (Laughter.)

8 CHAIRMAN GRIFFON: He's got to
9 give a harder report pretty soon.

10 First 100 cases report. I was
11 looking back at some of my notes. And I'm
12 sure Wanda and others have ideas on this, but
13 one thing I saw, I think Paul was saying some
14 things about just that we should have
15 something in this report of the value or
16 implications of the work, of the first 100
17 cases that we reviewed. And that didn't come
18 out in the front end of the report.

19 You know, I think part of the
20 reason -- well, I think in order to get
21 consensus I was maybe staying away from some
22 of those discussions, but I think here we are.

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1 So it's been turned back to our subcommittee
2 to consider this.

3 I guess I would pretty much open
4 it up to the floor. What I can do is maybe
5 take better notes at this meeting and figure
6 out. I don't think we have to have the exact
7 sentences, but if I can get some ideas on what
8 people think should be in this, I can rework
9 a draft and circulate it.

10 And for our consideration at our
11 next meeting, which is also before the next
12 full Board meeting, we've got another one of
13 these Subcommittee meetings coming up in
14 April. Is that right?

15 MR. KATZ: Yes.

16 CHAIRMAN GRIFFON: So I guess that
17 --

18 MEMBER MUNN: Just as a sidelight,
19 that is the only one that I had on my
20 calendar, by the way.

21 CHAIRMAN GRIFFON: You missed this
22 little one?

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1 MEMBER MUNN: I have no idea why
2 it isn't on my calendar, but it isn't.

3 MR. KATZ: Can I check? John
4 Poston, are you with us now? Dr. Poston?

5 CHAIRMAN GRIFFON: No.

6 MR. KATZ: Okay. He's still
7 there.

8 CHAIRMAN GRIFFON: Well, he'll
9 still have an opportunity. What I will do is
10 circulate this. And when it's in written
11 form, then you can really tear it apart. I
12 guess I will just open it up to ideas here.
13 And then I will try to redraft something and
14 circulate it.

15 MEMBER MUNN: I guess the real
16 question for me is, have you attempted to
17 address that issue of the value, what it was
18 doing?

19 CHAIRMAN GRIFFON: No. And right
20 now would be an opportunity to do so. I mean,
21 I apologize, Wanda. I haven't wrestled with
22 this much myself since the last meeting.

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1 MEMBER MUNN: Well, and neither
2 have I. I looked at it very thoroughly at one
3 juncture, but I actually, to be truthful, have
4 slept too many times since then.

5 CHAIRMAN GRIFFON: I mean, I have
6 some notes here, you know, value. You know,
7 some things that come to mind for me are that
8 I need specifics on this, I think.

9 Some things that come to mind to
10 me are that, going through these first on your
11 cases, some of our work in this audit affected
12 NIOSH changing their DR report or at least
13 partially -- I don't know the exact words. I
14 don't want to say that we were the only ones
15 that -- you know, because of us they modified
16 the whole DR report. They might have had some
17 of that ongoing already.

18 MEMBER MUNN: But it was an
19 influence.

20 CHAIRMAN GRIFFON: Yes. At least
21 they influenced -- that is probably a better
22 word -- influenced the redrafting and

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1 reshaping of some of the DR reports that
2 communicates to the claimants. I think that
3 was a positive output of value to this first
4 early work of the audit.

5 That's one thing that struck me a
6 lot. The other thing I think was that some of
7 this work has affected sort of the structuring
8 of the case files themselves by NIOSH to make
9 them more -- you know, this whole concept of
10 showing their work.

11 I guess then on the other things
12 that have come up out of this -- and I don't
13 know if these are necessarily, you know, maybe
14 slightly more negative. I'm not sure how to
15 term it, but I'll just draw out my things that
16 I have down.

17 We've had some concerns about the
18 overestimating approaches, especially related
19 to compensable cases that came out in these
20 first 100 cases but also related to this issue
21 of if someone gets a second cancer and you use
22 an overestimating approach the first time

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1 through, then they get it back and their dose
2 gets lower and they come waving these two
3 things to the Advisory Board meetings and
4 saying, you know, "My husband" or whoever "got
5 another cancer. And my dose went down. You
6 know, how can this happen?"

7 MEMBER MUNN: Repeatedly.

8 CHAIRMAN GRIFFON: Right, right.
9 So, you know, we understand it, but from a
10 communications standpoint, from communicating
11 with the public and fairness, you know, not
12 fairness but just clear communications with
13 the public, that's been a little problematic.

14 MEMBER MUNN: I'm almost sure that
15 is never going to be cleared up entirely.

16 CHAIRMAN GRIFFON: Yes, I know. I
17 know. I mean, I actually have some little
18 thoughts here, but this is probably -- some of
19 it is a little bit hindsight at this point
20 maybe.

21 MEMBER MUNN: I'm not sure whether
22 we help or hinder that communication in what

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1 we do, but I don't think that is going to go
2 away.

3 CHAIRMAN GRIFFON: Well, yes.
4 Yes. I mean, this is kind of probably a
5 little late to throw out there, but one notion
6 that I have had kicking around in my head for
7 a little while was that maybe the
8 overestimating approach should never have been
9 used for anything but survivor claims because
10 then they're obviously never going to get
11 another cancer, you know.

12 But, you know, at this point all
13 I'm prepared to say is that it's been kind of
14 an issue. And it's more of a communication
15 issue. It's not that we're saying NIOSH did
16 anything inappropriately from a scientific
17 standpoint but as a communication issue.

18 Other items that I have on my
19 list, Wanda, just for your thoughts -- and
20 maybe we can all just take this as homework
21 and take the draft and either add text in and
22 I can roll them together, we can do something

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1 like -- you know, however you want to work
2 this, but I have quality down and equity.

3 Again, I am not sure exactly. I
4 know that quality issues came up in the first
5 100 cases' reviews. I know the question of
6 equity continues to come up.

7 MEMBER MUNN: That's pretty
8 subjective.

9 CHAIRMAN GRIFFON: Yes. And these
10 tend to be lesser as I go down my list, I
11 think. And these are just like brainstorming.
12 I'm not sure if these would even make a draft,
13 let alone a final.

14 MEMBER MUNN: Quality certainly
15 ought to be in there if we haven't done an
16 adequate job of addressing the quality. I
17 thought that was one of the things that we had
18 attempted earlier.

19 CHAIRMAN GRIFFON: Yes. And then
20 it gets into how because quality is in this
21 report. So it may not rise to the level of
22 putting it in this beginning section, you

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1 know. It's already in the report. There is
2 a section about quality.

3 MEMBER MUNN: Yes.

4 CHAIRMAN GRIFFON: Let's see. And
5 the last item I have, but I think this also
6 comes out more in the findings, is the best
7 estimate cases, the cases that were near 50
8 percent, 45 to 50 percent. My note says --
9 and this I would have to check this for sure,
10 but I think it was four out of five or three
11 out of five, fairly subjective here but I said
12 required extensive revisions due to the audit.

13 And, you know, at the end of the
14 day, they weren't flipped if they didn't go
15 over 50 percent, but they were significantly
16 revised from the initial report. That was
17 just a note I made.

18 MEMBER MUNN: That's a pretty
19 significant number.

20 CHAIRMAN GRIFFON: Excuse me?

21 MEMBER MUNN: That's a pretty
22 significant number.

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1 CHAIRMAN GRIFFON: Right, four to
2 five of them. But I think three of them were
3 Savannah River because they were all at the
4 same site, you know. So that's one to think
5 about.

6 I don't know if you had anything
7 Wanda, that you were thinking about as far as
8 value or implications of the work that's --

9 MEMBER MUNN: If I had at any time
10 had such thoughts in my mind, they are
11 certainly not lodged there very deeply now.
12 I continue to have concerns and probably am of
13 the outlying opinion with respect to these
14 reports and how extensive they should be.

15 I know that Paul and I think you
16 also believe that these reports should be
17 quite extensive and that they should serve as
18 a truly official document and communication to
19 the Secretary in very thoroughly identifying
20 what it is that we have done.

21 It may be even more crucial that
22 that happened now with a new Secretary coming

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1 in, but my philosophy for all reports is that
2 brevity is the soul of precision and that the
3 less we say and the more concisely we say it,
4 the more likely it is to be factored into easy
5 communication with the individual or
6 individuals who are our target audience.

7 So I still continue to pump for
8 brevity, despite the fact that I know that is
9 a minority opinion here.

10 CHAIRMAN GRIFFON: Well, it only
11 is. It's a five-page report. I do hear what
12 you're saying. And that might be part of the
13 reason of having this sort of executive
14 summary up top. And if they want to look
15 further for more details? But at least this
16 gives them a paragraph or two overview of what
17 we did with this work. I hesitate.

18 DR. MAURO: No. Nothing specific,
19 as a general.

20 CHAIRMAN GRIFFON: Yes.

21 DR. MAURO: I understand what you
22 are trying to do. And I think, like you, I

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1 think about these things. And we are always
2 looking at it from the inside out. That is,
3 we are in the middle of a process, and we're
4 thinking about all the fine structure.

5 But I would say to myself, what do
6 you think the questions would be that the
7 Secretary of HHS would ask you? In other
8 words, let's say the Secretary walked in this
9 room right now and wanted to get a 15-minute
10 rundown. And let's say you had a series of
11 questions. Break yourself clear of being
12 inside the box because right now we are inside
13 just thinking about the programs the last five
14 years and all the findings and all the charts
15 in the back.

16 I would sooner say, you know,
17 "What do you think he would want? What would
18 the questions he would need?"

19 MEMBER MUNN: Well, and I think
20 what do you think the Secretary would want is
21 really and truly the crux of the question.
22 Certainly I don't know what the rest of you

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1 would do, but if I were sitting in the
2 Secretary's chair, the only thing I would
3 really want to know is, is this doing any
4 good? Are we doing this right?

5 Other than that, everything else
6 is in the details. And that's why the Board
7 and the agency and the contract exist. Are we
8 doing okay?

9 CHAIRMAN GRIFFON: I don't even
10 know, though. If you say are we -- yes. Who
11 is we? But also are we doing this right or is
12 NIOSH doing this right? You know, I think
13 from the claimant's standpoint, if we were
14 compensating 100 percent of the people, they
15 would say, yes, they are doing it right, you
16 know.

17 MEMBER MUNN: Well, the claimants
18 are not the only ones who would say that.

19 CHAIRMAN GRIFFON: What?

20 MEMBER MUNN: The claimants are
21 not the only ones who would say that.

22 CHAIRMAN GRIFFON: Right, right.

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1 MEMBER MUNN: That isn't my point.
2 The point is, is this being done correctly
3 under the aegis of the law?

4 DR. MAURO: Yes.

5 MEMBER MUNN: Is what we are doing
6 here, "we" being the collective we who are
7 involved in this statute, are we doing what
8 the statute requires us to do? And is it
9 getting anywhere? Those are really the only
10 two issues.

11 CHAIRMAN GRIFFON: Yes. The first
12 part of your question was, is it doing any
13 good? And that's different than I guess doing
14 it scientifically right, you know.

15 MEMBER MUNN: Well, is it doing it
16 in accordance with the statute, with the
17 requirements of the statute, not the intent of
18 one of the legislators, not with the intent of
19 any one of the administrators? Is this
20 meeting the letter of the law? And is this
21 being done properly? This is a key question.

22 I am not sure whether we get to

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1 that point. We talk about what we have done.
2 And we evaluate it to some degree. But I am
3 not sure we are very clear in response to what
4 I feel is the overriding question that a
5 person at the top of the responsibility chain
6 would want to hear.

7 CHAIRMAN GRIFFON: Right, right.
8 And I think part of the reason I in the first
9 draft of this sort of avoided this question
10 was that, you know, the answer is
11 unanswerable, I guess, because of all the
12 limitations of the first 100 cases.

13 That is what we have been through
14 before, is that we did all overestimates,
15 underestimates. Ninety-five out of 100 were
16 overestimates, underestimates. You know, so
17 I guess that was my -- you know, how much
18 conclusions can we draw from those big
19 questions like you are asking, Wanda? Are we
20 meeting the letter of the law?

21 Well, based on -- you know, we
22 would have to qualify that in so many ways.

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1 I'm not sure that would be a satisfactory
2 answer if I were on the receiving end of it,
3 you know.

4 MEMBER MUNN: Not a lot of
5 qualifications. Was this done the best way
6 that could be done at the time given the
7 circumstances and the information that was
8 available?

9 CHAIRMAN GRIFFON: But I'm saying
10 our sample doesn't tell us that answer.
11 That's what I'm saying.

12 MEMBER MUNN: No, no, it doesn't.

13 CHAIRMAN GRIFFON: Right.

14 MEMBER MUNN: That's why in my
15 view we need to qualify it in that way.

16 MR. KATZ: Can I give you a
17 government perspective? It is going to be a
18 government person who is receiving this
19 report.

20 MEMBER MUNN: Yes.

21 MR. KATZ: I mean, if I were the
22 Secretary, I would still want to know. I

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1 mean, we have been at this for five years or
2 whatever it's been, six years, whatever.

3 CHAIRMAN GRIFFON: How long.

4 MR. KATZ: Whatever, quite a
5 while. And you have been reviewing dose
6 reconstruction cases for this period. So I
7 mean, I think still -- and the Board has a
8 very specific charge to evaluate the quality
9 and validity of the dose reconstructions
10 within the context of what they are supposed
11 to do, these dose reconstructions.

12 So I mean, I think you can have a
13 very general summary statement up front that
14 gives the answers that can be given, given the
15 nature of the complexion of the cases
16 reviewed. And you have to consider that in
17 the context of the complexion of the cases
18 that get done in this program, too, because
19 many of the cases are underestimates and
20 overestimates.

21 You know, if 70 percent of the
22 cases were overestimates and underestimates,

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1 you need that context, too, of all of the
2 cases.

3 CHAIRMAN GRIFFON: Right.

4 DR. MAURO: So I think you could
5 talk, I mean, pretty briefly about give that
6 appropriate context and then the nature of the
7 cases that have been reviewed in these five
8 years and what you have found with respect to
9 those cases as to-- is the quality and validity
10 of them adequate for the purposes and so on
11 and where there are issues, what those issues
12 are very briefly. And then what's ahead would
13 be the rest of your summary. Now we're
14 getting into these different nature cases.

15 And so they can expect sort of
16 what the path is down the road for --

17 MEMBER MUNN: And that's --

18 DR. MAURO: I would think that you
19 could do that very briefly in a page abstract
20 at most or two-thirds of a page. And that
21 would be very helpful to the Secretary to know
22 sort of where we stand.

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1 MEMBER MUNN: And the second set
2 of 500 cases will be viewed differently.

3 MR. KATZ: Delve into some issues
4 that, you know, are still on the path.

5 DR. MAURO: And the wisdom of
6 starting off with the low-hanging fruit. You
7 know, certainly strategic judgment was made
8 early on that when we come at this problem,
9 we're going to go after the min/max.

10 I mean, there's a certain amount
11 of -- a judgment could be made by the Board as
12 to whether that strategy was a healthier
13 strategy, I think. I'm sorry to jump around
14 here.

15 MEMBER MUNN: It remains valid.
16 The attempt to resolve as many of these cases
17 as possible as early as possible was a
18 directive not just from the statute itself but
19 from the desires of the Board. That's what we
20 all wanted to do is clear as many of them as
21 we possibly could as early as we could, sooner
22 than better.

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1 MR. KATZ: Stu, does the workgroup
2 have sort of statistical breakouts? Are they
3 a picture of how many of all dose
4 reconstructions are min/max?

5 MR. HINNEFELD: Kathy Behling has
6 kind of kept something like that. I don't
7 know -

8 MR. KATZ: Kathy, are you there?

9 MR. HINNEFELD: -- if it's current
10 or not, but --

11 CHAIRMAN GRIFFON: Oh, cases
12 reviewed, but he's talking about --

13 MR. KATZ: I mean all the cases
14 done.

15 CHAIRMAN GRIFFON: Kathy has the
16 cases reviewed, yes.

17 MR. HINNEFELD: Cases reviewed.
18 So what do you want?

19 MR. KATZ: I mean, the context of
20 the cases reviewed, in part, is what is the --

21 CHAIRMAN GRIFFON: In other words,
22 is the --

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1 MR. KATZ: -- the nature of the
2 cases that get done in this program? So if 80
3 percent of the cases are min/max or 50
4 percent, whatever it is, that picture would be
5 helpful context for the Board to be able to
6 speak to what is found.

7 CHAIRMAN GRIFFON: Right, right.

8 MR. KATZ: So say --

9 MR. HINNEFELD: I would bet there
10 would be -- I don't know that that -

11 MR. KATZ: You can run those
12 statistics, right, or not? Is it not coded
13 that way?

14 MR. HINNEFELD: I am trying to
15 figure out what would be databased that would
16 tell me that for sure. I mean, the only item
17 that comes to mind that was databased that is
18 something like that, which is the indication,
19 the type indication, that the reviewer puts on
20 when he approves the dose reconstruction,
21 where he says it's full internal and external
22 overestimate of this kind, overestimate of

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1 that kind.

2 There is not really a lot of
3 guidance out there on what to choose. And
4 people tend to choose things differently, like
5 some may choose the Bethlehem Steel site
6 profile approach as being an overestimate
7 because it's a friendly -- you know, it's a
8 high site profile, where others would say
9 that's the only approach we've got as a poll.
10 Let's poll internal and external.

11 So there's not a lot of -

12 CHAIRMAN GRIFFON: We may not need
13 the exact numbers, though. I get your point.
14 It's not like it's a 50/50 breakup. It's best
15 estimate and over and underestimate.

16 MR. HINNEFELD: I can run that.

17 CHAIRMAN GRIFFON: Yes.

18 MR. HINNEFELD: It's a fairly easy
19 thing to run. The breakdown by probability of
20 causation, so you can see how the probability
21 of causations tend to be at the very low end
22 or -- well, actually, it kind of fakes you out

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1 because it is just everything above the 51
2 bar.

3 So the probability of causations
4 tend to be sort of low end and are fairly
5 modest as you go up higher. So there are some
6 things like that that can be done.

7 CHAIRMAN GRIFFON: That are
8 indicators anyway, yes.

9 MR. HINNEFELD: And I could run if
10 you're interested in that full internal and
11 external versus all the various kinds of over
12 and underestimates, I could run that. I mean,
13 I can set it up, but I won't actually do the
14 running of them. It can be done.

15 CHAIRMAN GRIFFON: Yes. It
16 wouldn't hurt in terms of a given perspective
17 put our numbers in what cases we did.

18 MR. HINNEFELD: So do you want to
19 go over those things I mentioned or do you
20 want to just go with Larry's last presentation
21 to the Board or the --

22 CHAIRMAN GRIFFON: We have that,

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1 right?

2 MR. HINNEFELD: Yes.

3 CHAIRMAN GRIFFON: So we can look
4 at that. But also I think running the
5 overestimate the way people defined it, while
6 we know it is not perfect, it might give us an
7 idea anyway.

8 MR. HINNEFELD: Do you want this
9 of all of the claims we have finished, rather
10 than the ones available for --

11 CHAIRMAN GRIFFON: I think so
12 because we are not going to quote this exact
13 number necessarily.

14 MR. KATZ: Just to give a sense.

15 CHAIRMAN GRIFFON: Just to give a
16 perspective of what -- yes.

17 MR. KATZ: Of what the Board has
18 reviewed compared to what the products are
19 that are out there.

20 CHAIRMAN GRIFFON: Right. But
21 again, when you said a "summary," I mean, I
22 think we have got enough to go with or I've

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1 got enough to make a first cut. And maybe
2 with everyone's input, you know, we can work
3 with redrafting like an executive summary
4 paragraph in the front end of this.

5 Some of the things you just said
6 said that they are -- I think they are in this
7 report. They just probably need to be pulled
8 out of the weeds and put into more of a
9 summary fashion statement.

10 Sometimes, though, I mean, I will
11 just say this up front because I see this
12 coming down the pike. Sometimes when we try
13 to boil down the language that was tortured
14 over in the later paragraphs, that is where we
15 got into trouble that we didn't get agreement.
16 So we kind of went back to being very precise
17 and sort of stating the facts.

18 You know, you start to summarize,
19 and you start to get more subjective with your
20 language. And that's why we ended up rolling
21 into -- you know, I actually made some
22 concessions and stated facts, instead of

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1 saying a large number, you know, start putting
2 adjectives in there. And people take offense
3 to one side or the other of certain issues.
4 But I will take a crack at it.

5 I think it is a good idea to give
6 a summary up front.

7 MR. KATZ: I mean, a Secretary is
8 not going to read a five-page report. The
9 Secretary will read that front piece.

10 CHAIRMAN GRIFFON: Right, right,
11 right. Yes. And if we grab his or her
12 attention enough, it may go further. But --

13 MR. KATZ: His people will go
14 further, his people.

15 CHAIRMAN GRIFFON: The program is
16 horrible. No.

17 MR. HINNEFELD: Ted, what would
18 you think of a report to the Secretary that
19 accounted for the lack of consensus on the
20 Subcommittee or maybe lack of consensus on the
21 Board?

22 MR. KATZ: Really, it is the Board

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1 that will matter. It doesn't matter if there
2 is consensus within the workgroup.

3 MR. HINNEFELD: Let's say --

4 CHAIRMAN GRIFFON: We mentioned
5 that, too. Paul mentioned that in the Board
6 meeting.

7 MR. HINNEFELD: Yes.

8 CHAIRMAN GRIFFON: Yes. So let's
9 take a shot at it. Let's hammer away at it.
10 And maybe we can come. You know, I'm just
11 saying we may have trouble concisely
12 summarizing because we have, you know --

13 MR. KATZ: But I think it would
14 speak well for the Board for the Board to be
15 able to come to consensus on as much as
16 possible, for the Board.

17 CHAIRMAN GRIFFON: Yes. I agree.
18 I agree, yes. I agree.

19 MR. KATZ: So whatever the reality
20 is-- is another issue.

21 CHAIRMAN GRIFFON: I mean, we came
22 to consensus on this five-page document. I

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1 thought that was pretty good, actually.

2 MR. HINNEFELD: If there are other
3 statistical queries you want me to do you
4 think of just drop me a --

5 CHAIRMAN GRIFFON: Okay. All
6 right. Wanda, is that all right from a
7 process perspective? I'll take --

8 MEMBER MUNN: Yes. I think it
9 probably is, Mark. I would appreciate it if
10 you would just send me a quick e-mail after
11 we're done here with your list of items that
12 you --

13 CHAIRMAN GRIFFON: Okay. Okay. I
14 have an old computer with me today. So it
15 might have to be tomorrow.

16 MEMBER MUNN: Well, your old
17 computer obviously is functioning better than
18 my new one.

19 CHAIRMAN GRIFFON: I just don't
20 have an internet access on this.

21 MEMBER MUNN: Oh, that's all
22 right. I seem to have eradicated my entire

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1 Board file, so not to worry.

2 CHAIRMAN GRIFFON: No big deal.

3 Ted is getting me a new computer soon anyway.

4 MEMBER MUNN: Yes, right.

5 CHAIRMAN GRIFFON: It's going to
6 be fully loaded with all of our answers, I
7 hear.

8 MEMBER MUNN: Yes. And all of the
9 material that has been exchanged over the last
10 six years is on it.

11 CHAIRMAN GRIFFON: Yes, yes.

12 MEMBER MUNN: Yes.

13 CHAIRMAN GRIFFON: Okay. So I
14 think, Brad or Mike, you -- I mean, I will
15 take a first shot at this. But feel free to
16 send me like paragraphs or ideas that you
17 think, you know, "I think this should be in
18 your opening paragraph," you know, "Don't
19 forget about adding this in."

20 Shoot me some of that stuff if
21 you've got it. I'll try to put it together
22 and circulate a draft in the near future and

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1 bring a draft back to the next meeting in
2 April that we can hopefully come to consensus
3 on as a group.

4 I'll get it to John as well. I
5 don't think he's on the line yet.

6 MR. KATZ: Another suggestion is
7 you may want to put up front what the Board
8 was charged to do, up front in that abstract.

9 CHAIRMAN GRIFFON: Right in the
10 executive summary?

11 MR. KATZ: Yes.

12 CHAIRMAN GRIFFON: Okay. We don't
13 want to get in too deep.

14 MR. KATZ: It's a sentence or two.

15 CHAIRMAN GRIFFON: Right.

16 MR. KATZ: But it makes sense to
17 have it up front.

18 CHAIRMAN GRIFFON: Yes.

19 MR. KATZ: So that is the charge
20 and --

21 MEMBER MUNN: Well, that's kind of
22 what we do in the first --

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1 CHAIRMAN GRIFFON: That's what I
2 thought we did.

3 MR. KATZ: I don't have it in
4 front of me.

5 CHAIRMAN GRIFFON: Okay.

6 MR. KATZ: I'm just saying --

7 MEMBER MUNN: Oh, yes. The first
8 paragraph says --

9 CHAIRMAN GRIFFON: It may be more
10 than we want for that.

11 MEMBER MUNN: It cites the law
12 itself and says, "The President delegated to
13 the Secretary HHS shall establish an
14 independent review process." So all of that
15 language is there.

16 CHAIRMAN GRIFFON: A lot of that
17 is in there. We might be able to shorten it
18 up a little bit, but --

19 MEMBER MUNN: "Advise the
20 President of the scientific validity and
21 quality of dose estimation and reconstruction
22 efforts."

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1 CHAIRMAN GRIFFON: All right. All
2 right. So I think we will do that. And that
3 is our path forward on the report.

4 I am ready to go to the next item
5 if people are ready. Or do you want to take
6 five?

7 MEMBER MUNN: No.

8 CHAIRMAN GRIFFON: Let's see.
9 What did I have next? Case selection?

10 MR. KATZ: Yes.

11 CHAIRMAN GRIFFON: Case selection.
12 I'll be honest with you. I wasn't sure we
13 were going to get this far, but I don't know
14 if I have our original criteria in front of
15 me. Wanda, do you have that on your computer?

16 MEMBER MUNN: I am serious.

17 CHAIRMAN GRIFFON: I'm just
18 kidding.

19 MEMBER MUNN: I am serious. Every
20 item of my Board information that was not
21 compiled yesterday during our meeting is not
22 currently coming up for me. It's got to be on

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1 here somewhere, but it is not where it is
2 normally filed. And so --

3 CHAIRMAN GRIFFON: You know what?
4 I will ask. I guess I can ask right now. I
5 think one thing that I heard Kathy talk about,
6 which I think will be very useful for us, is
7 when we have it in the database because we
8 have had updates at certain points on how many
9 cases per site, things like that.

10 And we have I think an original
11 spreadsheet that I put together from the
12 original. You know, that was at a point in
13 time, though, of how many cases by site.

14 MEMBER MUNN: Oh, yes. We were
15 working by site.

16 CHAIRMAN GRIFFON: Yes.

17 MEMBER MUNN: We were working by
18 period of employment.

19 CHAIRMAN GRIFFON: Right.

20 MEMBER MUNN: We were working by
21 type of cancer. We were working by --

22 CHAIRMAN GRIFFON: Years worked.

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1 MEMBER MUNN: -- POC, yes.

2 CHAIRMAN GRIFFON: Total years
3 worked, yes. Yes, POC. Right. And I'm not
4 sure. Actually, I don't see much fault with
5 our criteria, but I don't have it in front of
6 me.

7 I guess I was going to say if we
8 wanted to for the next -- since we are having
9 one of these in April again, I could bring the
10 -- because we wrote out a selection criteria
11 document. And I could actually print that
12 out, forward that to the Subcommittee and look
13 at it specifically and see if we want to
14 update the criteria as a written document.

15 I think that is the product we
16 want to be able to bring back to the Board.

17 MEMBER MUNN: That is probably a
18 good idea -

19 CHAIRMAN GRIFFON: Yes.

20 MEMBER MUNN: -- although I
21 thought about those criteria from time to time
22 and was rather surprised that I thought we had

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1 done a better than average job of identifying
2 the various aspects we needed to look at.

3 CHAIRMAN GRIFFON: Yes. We kind
4 of stumbled into filling a lot of the fields,
5 too, you know, accidentally or on purpose.
6 And then the other thing I guess to consider
7 would be the overall number, you know. Ted is
8 shaking his head violently on that one.

9 So that's the over-arching issue,
10 I think, of concern, is do we still want to
11 stick to the -- two and a half percent was
12 pretty arbitrary. It was based on Till's
13 assessment of the sister program there.

14 MEMBER MUNN: Well, yes. But that
15 is a fairly widely accepted --

16 CHAIRMAN GRIFFON: Sample, yes.

17 MEMBER MUNN: -- valid number.

18 CHAIRMAN GRIFFON: Yes, yes.

19 MEMBER MUNN: So it isn't as
20 though we just picked it out of the --

21 CHAIRMAN GRIFFON: Oh, yes. It
22 wasn't without basis, yes. But we can see

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1 what that -- I don't know right now what that
2 means in terms of how many total cases are in
3 the system. I don't know offhand.

4 MEMBER MUNN: Twenty-six thousand
5 the last time.

6 MR. HINNEFELD: Well, if you are
7 talking about referrals, I mean, the number of
8 cases that have come over to us, we are at
9 29,000.

10 CHAIRMAN GRIFFON: Twenty-nine
11 thousand now.

12 MR. HINNEFELD: In terms of number
13 of dose reconstructions completed, it's, oh,
14 five to six thousand less than that probably.

15 It's over 20,000 have been done.

16 CHAIRMAN GRIFFON: Right.

17 MR. HINNEFELD: And then how many
18 are available for adjudication I don't know or
19 have been adjudicated and available to you I
20 don't know. Something that --

21 CHAIRMAN GRIFFON: So that would
22 750 if we based it on 30,000, right? It would

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1 be two and a half percent of all the cases?
2 Ten percent would be 3,000. And a quarter of
3 that, yes.

4 MR. KATZ: I mean, you might
5 consider, for example, do you need to double
6 your rate just to get within --

7 CHAIRMAN GRIFFON: Right. And
8 that has implications on SC&A and whether they
9 have --

10 MR. KATZ: Sure.

11 CHAIRMAN GRIFFON: -- the
12 person-power.

13 MR. HINNEFELD: I think 3,000
14 completed cases a year has certainly been
15 attained for the last several years.

16 CHAIRMAN GRIFFON: By NIOSH, yes,
17 yes.

18 MR. HINNEFELD: Well, in fact,
19 more than that, more than that. I don't
20 remember the numbers right offhand. I think
21 Larry may have put them in his last
22 presentation, in fact. I don't know I have

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1 that --

2 CHAIRMAN GRIFFON: Yes.

3 MR. HINNEFELD: To give you an
4 idea --

5 MEMBER MUNN: So you are thinking
6 less than 4,000, though?

7 MR. HINNEFELD: I don't know. It
8 might be more than that. Let me see what I
9 can find.

10 MEMBER MUNN: Well, you know, if
11 you were talking 4,000 cases a year, we're
12 still talking about 100, 2.5 would be 100.

13 DR. MAURO: We've been doing 60.
14 SC&A has been doing 60.

15 MEMBER MUNN: Yes.

16 CHAIRMAN GRIFFON: Right, right,
17 right. But we have talked in the past about
18 upping that. John looks like he needs a
19 little more workload, right?

20 DR. MAURO: I'll take it.

21 CHAIRMAN GRIFFON: Yes, yes.

22 MEMBER MUNN: At the risk of

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1 adding the possibility of one more evaluation,
2 which pains me just to even think about it,
3 but if we were able to look at the cases that
4 we have done, the findings that have developed
5 and make some subjective evaluation with
6 respect to the types of findings that we're
7 finding, whether there is a trend there, if we
8 can identify whether there are any trends,
9 then that might affect our decision with
10 respect to both the type and number of --

11 CHAIRMAN GRIFFON: Yes. That is a
12 good point.

13 MEMBER MUNN: -- what we need to
14 do. But this business of identifying trends
15 with this kind of data just at first look
16 appears overwhelmingly difficult to do. I'm
17 not sure whether that's even an achievable
18 thing.

19 Certainly if one considers no drastic
20 expansion of staff support or anything of that
21 sort, I don't know how we can do that.

22 CHAIRMAN GRIFFON: Well, that's a

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1 good idea anyway. And maybe having the
2 database, having all of the cases on the
3 database is a starting point anyway. At least
4 we will have something that we can query from.

5 But I agree with you. It may be
6 difficult to see trends, but it is a good idea
7 in theory.

8 MEMBER MUNN: Kathy has something
9 going on in her head. I can tell.

10 MS. BEHLING: This is Kathy.
11 Actually, early on -- and it may have been
12 maybe a second or third presentation that I
13 made to the Board. And this would be after
14 our third set of cases or so. I did attempt
15 to put together some evaluation of exactly
16 this type of thing. What were our findings?
17 How could we group those findings?

18 It was difficult to do back then
19 because in some cases it's difficult to
20 categorize them specifically. But I know I
21 had done that early on.

22 It would be a fairly difficult

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1 task at this point, but I could possibly go
2 back and look at what I had presented to the
3 Board.

4 And that was, like I said, several
5 years ago with some of the earlier cases. And
6 I could present that.

7 CHAIRMAN GRIFFON: Yes. That
8 would be useful. Maybe we can update it with
9 what we have now, too.

10 MS. BEHLING: Okay. The other
11 thing I wanted to just mention with regard to
12 the criteria that you all have been using, I
13 believe that initially in your letter to the
14 Secretary, you were going to include
15 statistics at the end.

16 And if you look at that attachment
17 and those statistics, that identifies in each
18 one of those what the criteria, what the
19 initial criteria, was for the Board.

20 And I can provide you with -- you
21 had sort of a flow diagram. I still have that
22 with almost a handwritten type of thing that

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1 I still have for the initial criteria that was
2 selected by the Board.

3 CHAIRMAN GRIFFON: Okay. So I
4 have your attachments, and they are a part of
5 the -- right now, anyway, we were going to
6 have them as part of the report depending on
7 the Board's wishes as far as the length of the
8 report. But I have those attachments.

9 Is it something different than
10 those attachments?

11 MS. BEHLING: I do have one other
12 document that I believe we were initially
13 given when we were granted this contract.

14 CHAIRMAN GRIFFON: Okay.

15 MS. BEHLING: And I will scan
16 that, in fact, e-mail that --

17 CHAIRMAN GRIFFON: All right.

18 MS. BEHLING: -- over to you also.

19 CHAIRMAN GRIFFON: Okay. It might
20 be the flow chart from our -- yes, send that
21 to me. And for the next meeting, I will also,
22 like I said, circulate this. I know somewhere

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1 in my archived files I have our original
2 selection criteria that we came up with as a
3 workgroup at that time, I think.

4 MS. BEHLING: Right. And once we
5 see the database, as I said, I included a
6 statistics tab that is supposed to cover each
7 of the areas where you were looking to achieve
8 some -- you know, you had a goal to achieve
9 for the different criteria.

10 CHAIRMAN GRIFFON: Okay. Thank
11 you, Kathy.

12 MS. BEHLING: You're welcome.

13 CHAIRMAN GRIFFON: Other comments?
14 I guess we'll -- so I'm pushing this to the
15 next meeting. And with all of those things we
16 just mentioned, we will try to bring those to
17 that meeting or get them to people prior to
18 the meeting for consideration. So we'll take
19 this up again at the next meeting if that is
20 okay.

21 MEMBER MUNN: That's going to be
22 an armload.

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1 CHAIRMAN GRIFFON: Yes.

2 MEMBER GIBSON: I think that
3 presentation Kathy was just talking about, she
4 sent it out as a PowerPoint back in April of
5 '07.

6 CHAIRMAN GRIFFON: April of '07
7 you think? Okay.

8 MEMBER GIBSON: I have it here.

9 CHAIRMAN GRIFFON: Yes. If you
10 can forward it to people, that would be great.
11 And maybe forward it to Kathy to make sure
12 it's the same one she's thinking about.

13 MS. BEHLING: That's a good idea.

14 CHAIRMAN GRIFFON: Yes. Yes.

15 MS. BEHLING: Thanks.

16 CHAIRMAN GRIFFON: Okay. This
17 might be a good time as a break point. Let's
18 take like ten minutes and reconvene. And
19 we'll start in on the eighth set, make sure
20 everybody has it on their computers and start
21 up on the eighth set. Is that okay?

22 MEMBER MUNN: Okay.

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1 CHAIRMAN GRIFFON: All right.

2 MR. KATZ: Okay. I am going to
3 just put the phone on mute.

4 (Whereupon, the above-entitled
5 matter went off the record at 2:01
6 p.m. and resumed at 2:14 p.m.)

7 MR. KATZ: Wanda, are you back?

8 MEMBER MUNN: Yes, I am.

9 MR. KATZ: Great.

10 CHAIRMAN GRIFFON: Okay. We are
11 ready to start up again, our final topic on
12 the agenda, actually. I don't really expect
13 that we are going to make it all the way
14 through the eighth set of cases, the matrix.
15 It's 64 pages. But we will do what we have
16 done in past meetings.

17 This is our first cut through with
18 the eighth set of cases. We have gotten
19 responses, I think, for all. There may be
20 some that --

21 MR. HINNEFELD: I won't guarantee
22 there's one for all of them.

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1 CHAIRMAN GRIFFON: Right.

2 MR. HINNEFELD: We got a group of
3 them together, and we sent them on.

4 CHAIRMAN GRIFFON: Right, right.
5 We have most of the responses, I think, from
6 NIOSH in here at this point. So it's a good
7 time to start out with this.

8 I guess we will do like we always
9 do. If, Doug or John, you guys can sort of
10 summarize the finding? And then NIOSH can
11 explain the response. And then we'll have our
12 discussion.

13 DR. MAURO: Sure.

14 CHAIRMAN GRIFFON: All right. So
15 start off with 149.1 is the first one.

16 DR. MAURO: Yes. It's Bridgeport
17 Brass, women who developed breast cancer. And
18 the dose reconstruction was performed using
19 the Bridgeport Brass Adrian laboratory
20 exposure matrix.

21 By the way, we did have a formal
22 review of that as a separate part of the

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1 eighth set. I guess eventually under a
2 separate venue, we will look at those what I
3 call many site profile reviews.

4 MR. HINNEFELD: However you guys
5 want to do it. We have added some responses
6 to our matrix.

7 DR. MAURO: Okay.

8 MR. HINNEFELD: So we have added
9 some. I'm not sure Bridgeport is one of them.

10 DR. MAURO: So what I will quickly
11 go through, so here we have a woman. She was
12 assigned an external exposure using exposure
13 matrix. And you folks have used a very
14 claimant-favorable strategy, pooled all of the
15 film badge data, took off the upper 95th
16 percentile. And you are applying that across
17 the board.

18 And it is in our opinion -- by the
19 way, this woman was compensated. Okay? And
20 in our opinion, this is a strange finding
21 because we don't always go this direction.

22 I don't know if I could tell you

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1 her occupation because I will start to zero in
2 and you can identify who she is. But she had
3 an occupation which would not put her up close
4 and personal to the extrusion activities.

5 And so in my opinion, you probably
6 have assigned her an extremely favorable dose:
7 external dose and internal dose. And she was
8 compensated. So interestingly enough, our
9 finding with regards to this person is you
10 probably -- this is probably a substantial
11 overestimate -- if there is any place where
12 you would say maybe the median dose would
13 apply.

14 Here is a case where you elect to
15 universally apply the upper 95th percentile,
16 you know, every year after year, which is
17 quite a conservative assumption in and of
18 itself, even for a person who is working in an
19 operational setting.

20 Here you applied it to a person
21 who is not -- I couldn't envision the [Identifying
22 Information Redacted] always being on the operational

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1 floor.

2 CHAIRMAN GRIFFON: Almost too
3 conservative you are saying?

4 DR. MAURO: Yes.

5 CHAIRMAN GRIFFON: Yes.

6 DR. MAURO: To the point where now
7 -- see, that's what we basically found about
8 -- that goes for both internal and external.
9 We were going to be able to quickly go through
10 these. We do have some concerns regarding the
11 matrix. And whether or not you want to talk
12 about that now --

13 CHAIRMAN GRIFFON: Sure. Yes. I
14 think we can do it. You put your thing at the
15 bottom, I think, of this matrix, Stu.

16 MR. HINNEFELD: Bridgeport was one
17 of them.

18 CHAIRMAN GRIFFON: Bridgeport is
19 one of them.

20 DR. MAURO: Yes.

21 CHAIRMAN GRIFFON: I see it listed
22 at the bottom.

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1 MR. HINNEFELD: Okay.

2 CHAIRMAN GRIFFON: Attachment 1,
3 finding 2 or something like that.

4 MR. HINNEFELD: Okay.

5 DR. MAURO: What we can do when we
6 get down there because we --

7 MR. HINNEFELD: We can jump down
8 --

9 CHAIRMAN GRIFFON: Since we are
10 talking about Bridgeport, I think it is easier
11 to stay on Bridgeport, instead of --

12 DR. MAURO: So as far as 1.1, I
13 mean, basically think of it like this. You
14 have external full-time. You have external
15 non-penetrating. And these are the different
16 findings, both of which you employ the upper
17 95th percentile. It is certainly extremely
18 claimant-favorable to apply that to this
19 person.

20 That would be 149.1.

21 CHAIRMAN GRIFFON: No. Your 1.1
22 says the derived value is low by a factor of

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1 two.

2 DR. MAURO: Right. That goes
3 toward the exposure matrix.

4 CHAIRMAN GRIFFON: Matrix more
5 than the case.

6 DR. MAURO: Yes.

7 CHAIRMAN GRIFFON: Right. I
8 understand that.

9 DR. MAURO: And we will get there
10 later, but the reason we felt that when you
11 took your pool data and you selected the upper
12 95th percentile, you derived it, claiming that
13 it was correlated data. That is, you didn't
14 just take all of the data and pool it. You
15 said that they're correlated by person. So in
16 other words, it is really a distribution of a
17 person's annual data.

18 And that would be the right way to
19 do it because think of it like this. If you
20 took everybody's weekly exposure and put it,
21 everyone in the numbers, and put it into one
22 big pot and then build a model and talk off

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1 the upper 95th percentile, what might happen
2 is the upper 95th percentile may underestimate
3 what the upper 95th percentile dose is to a
4 real person because the real person may always
5 -- we reran and correlated it. We had a
6 statistician run it as correlated data.

7 CHAIRMAN GRIFFON: Yes.

8 DR. MAURO: And when we did that,
9 we came up with an upper 95th percentile that
10 was twice your value. So though you claim in
11 the matrix that you processed your data in a
12 correlated way, we were only able to match
13 your numbers when we processed your data in an
14 uncorrelated way. When we did it in a
15 correlated way, we came up with numbers that
16 were twice as high.

17 Of course, it's irrelevant as
18 applied to this particular case because she
19 was compensated anyway.

20 CHAIRMAN GRIFFON: Yes. We're
21 talking about matrix.

22 DR. MAURO: So now we're in the

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1 matrix territory. That goes not only for
2 penetrating but also non-penetrating. So that
3 covers, well, 149.1. I believe that's also
4 149.2. Let's see what the next one is.

5 CHAIRMAN GRIFFON: Well, let's
6 see.

7 DR. MAURO: Yes.

8 CHAIRMAN GRIFFON: Can we stop at
9 1 at least?

10 DR. MAURO: Oh, yes. Sure. Yes.

11 CHAIRMAN GRIFFON: I want to hear
12 what NIOSH has to say about that one.

13 DR. MAURO: Yes.

14 MR. HINNEFELD: Well, our response
15 talks about the different method of generating
16 how the 95th percentile was generated and
17 seems to indicate that we understood how you
18 generated yours and that because of the way
19 ours was generated, that's why we cannot get
20 numbers physically in generation.

21 From reading your finding, it's
22 not clear to me that we really understand each

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1 other, how we did it. If you've got a
2 response?

3 DR. MAURO: No.

4 MR. HINNEFELD: Okay. The
5 response we wrote -- well, here. Let me just
6 go through it.

7 CHAIRMAN GRIFFON: The one right
8 here, right?

9 DR. MAURO: This one?

10 MR. HINNEFELD: Yes. It's NIOSH
11 response. It's in the matrix.

12 CHAIRMAN GRIFFON: I thought you
13 might have been referring to another separate
14 document.

15 MR. HINNEFELD: No. This is it,
16 that there was apparently a combination of the
17 various two-week periods. It almost -- now,
18 John, in your discussion of -- you know, there
19 is no discussion here about correlated,
20 uncorrelated.

21 DR. MAURO: It's in the main body
22 where you talk about correlated.

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1 MR. HINNEFELD: So yes. It could
2 very well be in your report, yes. But I mean,
3 here in the response, there is no discussion
4 of it.

5 So I think that we may be facing a
6 situation where we have got to --

7 CHAIRMAN GRIFFON: Share those.

8 MR. HINNEFELD: -- make sure we
9 are both clear on how we did this.

10 DR. MAURO: Yes. In our report,
11 we show you exactly how we got our numbers.

12 MR. HINNEFELD: Okay.

13 DR. MAURO: We ran it both ways.
14 We ran it both correlated and uncorrelated.

15 MR. HINNEFELD: Yes.

16 DR. MAURO: Now, what we concluded
17 was that since our uncorrelated numbers
18 matched yours exactly, we felt that, even
19 though you said you did it in a correlated
20 way, we don't think you really did.

21 MR. HINNEFELD: Okay. Where on
22 your --

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1 DR. MAURO: It's in the main. You
2 have to go to the actual report.

3 MR. HINNEFELD: Yes. I'm in your
4 report.

5 DR. MAURO: There should be a
6 discussion there on correlated/uncorrelated.

7 CHAIRMAN GRIFFON: When you say,
8 correlated, just tell me again. You're
9 talking about an individual's dose by year?

10 DR. MAURO: Yes. In other words,
11 yes. And you're getting --

12 CHAIRMAN GRIFFON: You're getting
13 a distribution of all of the different
14 individuals, right?

15 DR. MAURO: Exactly.

16 CHAIRMAN GRIFFON: As was
17 uncorrelated, it was just the badge data.

18 DR. MAURO: This is badge data
19 because one person may very well have a job.

20 CHAIRMAN GRIFFON: And with
21 correlated, you got higher values?

22 DR. MAURO: You get a factor of

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1 two higher, yes. Right.

2 CHAIRMAN GRIFFON: I wouldn't have
3 guessed that, actually.

4 DR. MAURO: Yes. And Harry did
5 it. I didn't know about this.

6 CHAIRMAN GRIFFON: I wouldn't have
7 guessed that because I would have thought the
8 badge data -- I don't know. I'm not sure I
9 can assume either way.

10 DR. MAURO: Well, you know, I
11 think we probably need to communicate more on
12 this one.

13 CHAIRMAN GRIFFON: Yes. I'm sure
14 the --

15 DR. MAURO: And it should be part
16 of not so much this case, but it should be
17 part of the generic review of the --

18 CHAIRMAN GRIFFON: Yes, for
19 correlated. Yes.

20 DR. MAURO: So I was expecting to
21 get there with it.

22 MR. HINNEFELD: Is it maybe in

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1 that section of your report? I don't --

2 DR. MAURO: It is not in the
3 report?

4 MR. HINNEFELD: I don't see it in
5 the findings part.

6 DR. MAURO: I'd have to open up my
7 report and see if I can find it. I wish Harry
8 was on the phone.

9 MR. HINNEFELD: I have heard of
10 discussions in our office about correlated
11 versus uncorrelated data --

12 DR. MAURO: Right.

13 MR. HINNEFELD: -- and the impacts
14 that having correlated data would have on a
15 Monte Carlo.

16 DR. MAURO: Yes.

17 CHAIRMAN GRIFFON: And so I know
18 that it is an issue. I don't know how it
19 would go exactly. Let's see. That would be
20 in your -- it would probably be in the last
21 book. Let's see.

22 DR. MAURO: This might not be an

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1 actual case.

2 MR. HINNEFELD: Yes.

3 DR. MAURO: It might be in
4 attachment 1.

5 MR. HINNEFELD: Yes.

6 DR. MAURO: I would have to go
7 look at it.

8 MR. SIEBERT: That must be the
9 case. Yes, it must be.

10 DR. MAURO: It may not be because
11 I think that the way we said it in here is
12 that we came up with a number that was -- in
13 fact, the actual words we used when we did
14 this case was we came up with a factor of two
15 higher. We don't know why. That's what the
16 words are right now on this write-up.

17 And later when we did the more
18 formal review of the exposure matrix for
19 Bridgeport Brass, you know, that's where we
20 uncovered the factor of two. And we think it
21 has to do with correlated versus uncorrelated.

22 MR. HINNEFELD: Okay. Yes. The

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1 discussion of correlated versus uncorrelated
2 is --

3 DR. MAURO: Is in the --

4 MR. HINNEFELD: Okay. Now, I
5 don't know if we say anything about that in
6 our report, which would be in the matrix.

7 DR. MAURO: And I think your
8 statisticians will have to look at that and
9 see if they agree or not. There may be more
10 to the story. There may be. You know, we
11 just happened to see, oh, we matched it when
12 it was uncorrelated and just don't have
13 anything --

14 CHAIRMAN GRIFFON: Okay. I put
15 that as an action for you, Stu, to have NIOSH
16 review SC&A's analysis.

17 MR. HINNEFELD: It appears we
18 haven't provided a response on the findings.

19 DR. MAURO: On those.

20 MR. HINNEFELD: At least it is not
21 in this one.

22 CHAIRMAN GRIFFON: I was just

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1 going to say as I am tracking these things,
2 the way I am putting this right now for 149.1
3 and .3, .3 is your --

4 DR. MAURO: Is the other one.

5 CHAIRMAN GRIFFON: Yes. The way I
6 am putting that is that NIOSH is going to
7 review this, no effect on this case since the
8 case was compensable. Now, for 149.2, it is
9 going to be different because that is the
10 question, is the 95th the right choice for
11 this work?

12 DR. MAURO: For this person.

13 CHAIRMAN GRIFFON: For this job.

14 DR. MAURO: Yes. That's good.

15 Good.

16 CHAIRMAN GRIFFON: So okay. So I
17 think we can go on to that number 2 now.

18 DR. MAURO: Well, they have
19 answered that. Yes. Right. They haven't
20 answered the 2.

21 CHAIRMAN GRIFFON: Yes, 149.2. I
22 guess the question that I have from the way

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1 John presented it is, is this the right
2 selection? Oftentimes if you're clearly not
3 in the RAD area, you do select the whole
4 distribution, at least, or even ambient those
5 models, so in this case you assign a 95th, it
6 seems to be a bit conservative for this job.

7 MR. HINNEFELD: Well, I know why
8 we would do it. It's because when you start
9 deciding that you are going to parse people up
10 by job title and have certain people get this
11 because you're doing a dose model anyway. The
12 only difference would be you would have two
13 dose models, instead of one, or maybe even
14 more than two.

15 When you start to parse people out
16 by job title, first of all, there are a lot of
17 cases where you don't have a job title. So
18 you may have a nurse that you have their job title and
19 another nurse whom you don't have their job title.

20 One gets the high model. If you
21 don't have a job title, you give them a high
22 model. So then one gets the high model. Then

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1 we'll get the low model. That's one
2 fundamental difficulty of parsing your models
3 up by a job title.

4 The other one is that a job title
5 and the exposure that goes with the job title
6 are not intuitive all the time. You know,
7 it's difficult to make that. And you
8 absolutely will get objections from people who
9 are in the low model, saying, you don't
10 understand what I did.

11 CHAIRMAN GRIFFON: Oh, yes.

12 MR. HINNEFELD: Now, I don't know
13 for an industrial [Identifying Information Redacted].
14 You would think the [Identifying Information
15 Redacted] would spend the majority of the day in
16 the dispensary. We don't know for sure, you
17 know, things like that.

18 So there are certain, I think,
19 when we are thinking correctly on our part,
20 there is a certain reticence in dividing these
21 dose models up based on job title. And that's
22 essentially what our response is.

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1 Plus, we don't know. Maybe this
2 stuff was tracked all over the place. We have
3 heard examples of break rooms and lunch rooms
4 being affected by the material they were using
5 in the room that --

6 DR. MAURO: I would agree with
7 internal because the airborne activity could
8 find its way everywhere. External you've got
9 a pretty high dose here.

10 MR. HINNEFELD: Yes.

11 DR. MAURO: You have to be pretty
12 close to the middle. I mean, we're talking
13 uranium.

14 MR. HINNEFELD: Yes. I know. I
15 know. I just think, in general, I think when
16 we're thinking correctly, there is certain
17 reticence to try to parse that out very much
18 based on job title. And essentially that is
19 what we said. We have kind of laid out a
20 series of reasons why. A lot of times we are
21 not very comfortable with trying to do that.

22 MEMBER MUNN: Well, yes, but there

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1 is a great deal of value in what you just
2 said. By the same token, when you know
3 certain things about a specific site and about
4 the people who work there, then it would seem
5 reasonable for us to make the best scientific
6 judgment based on the information we have,
7 rather than being unduly concerned about the
8 feedback from other people with similar kinds
9 of job descriptions, either on that side or
10 elsewhere.

11 We are going to have that, I
12 suspect, regardless of whether those decisions
13 are made. And it's one of the problems that
14 would face, I would think, the dose
15 reconstructor under any circumstances. To be
16 able to make some value judgment was my
17 understanding was part of the job.

18 And this is one of those cases
19 where given a significant difference in what
20 is likely to have been the case, it appears
21 that SC&A has a valid issue with respect to
22 this particular person.

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1 And one can't say that about
2 [Identifying Information Redacted] anywhere or
3 everywhere else other than here, you know, the
4 materials that are involved on this particular site.
5 And one can certainly make some good judgments about
6 it.

7 It's sort of a moot point at this
8 juncture since this was a principal case in
9 any event, but as a matter of principle and
10 policy, it doesn't seem reasonable for us to
11 take the position that dose reconstructors
12 cannot make that kind of evaluation.

13 DR. MAURO: And, Wanda, with
14 regard to this particular exposure matrix,
15 now, we have reviewed lots of AWE exposure
16 matrices, including TBD 6000. Where an effort
17 was made to parse job categories, this
18 particular one, that wasn't done.

19 So one could argue, well, is that
20 really fair? In other words, this one you
21 always apply the 95th percent everywhere. So,
22 really, you don't have provisions for that

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1 parsing while you do in other places.

2 MEMBER MUNN: But the amount of
3 fairness was supposed to be the coup de grace
4 for all of this that we do isn't necessarily
5 so. The coup de grace out to be one of
6 reason, not of fairness. And to remove the
7 ability of our dose reconstructors to make
8 some educated judgments about the cases that
9 come before them would not seem wise to me.

10 MR. HINNEFELD: Well, I mean, we
11 can check. I don't know that there is a
12 finding. Well, these are all relative. You
13 know, all of these findings, this is kind of
14 a site profile findings. I don't know if it's
15 duplicated back in the back but clearly a site
16 profile finding because --

17 CHAIRMAN GRIFFON: Six would be,
18 really, yes.

19 MR. HINNEFELD: The six would be.
20 You don't have one model.

21 CHAIRMAN GRIFFON: Right, yes,
22 like you do in several other sets.

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1 MR. HINNEFELD: Yes, yes.

2 DR. MAURO: Interestingly enough,
3 you will see we don't go in our review of the
4 exposure matrix, we are not critical.

5 MR. HINNEFELD: Yes. It's not
6 listed.

7 DR. MAURO: Because we felt it
8 very favorable that you all would hope to go
9 into the 95th percentile except for this
10 correlation business.

11 MR. HINNEFELD: Yes.

12 DR. MAURO: That philosophy of the
13 95th percentile applies to everyone. You
14 know, as a general rule of thumb, that is
15 pretty good. But then there along I come.
16 And I said, well, wait a minute.

17 CHAIRMAN GRIFFON: Yes. I guess
18 as I read your response, you know, it strikes
19 me that that does certainly give rationale for
20 assigning the full distribution. You know
21 what I mean?

22 DR. MAURO: Yes.

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1 CHAIRMAN GRIFFON: So someone who
2 was likely not in the operational area a lot.
3 But you weren't sure. So you are saying okay.
4 But there was something in the 95th. It seems
5 to me like a little bit of overkill.

6 MR. HINNEFELD: Okay. So, then --

7 CHAIRMAN GRIFFON: You know, what
8 is the action?

9 MR. HINNEFELD: What action do you
10 have here? I mean, we wouldn't do anything
11 for this claim. I don't know what our status
12 is on Bridgeport.

13 We are always, you know, liable to
14 get more from any given site. I don't know if
15 you've got any open now or not. It was why we
16 get more, I guess. I don't know that I
17 necessarily want to commit to a lot here. I
18 mean, there are --

19 CHAIRMAN GRIFFON: Right.

20 MR. HINNEFELD: I was not the
21 person who developed Bridgeport or actually
22 worked on Bridgeport Brass. I don't know what

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1 kind of evidence people are feeling, if we
2 have about -- what happened there, I believe
3 this is an extreme process.

4 DR. MAURO: Yes.

5 CHAIRMAN GRIFFON: Well, I mean,
6 maybe I could offer that you can keep it in
7 the mini site profile review portion of this
8 and say that NIOSH will further consider the
9 applicability of a tiered model, --

10 MR. HINNEFELD: Okay.

11 CHAIRMAN GRIFFON: -- rather than
12 a one size fits all model, 95 percentile, just
13 to be clear. Does that make sense?

14 MR. HINNEFELD: Yes.

15 CHAIRMAN GRIFFON: And I say
16 consider because you may look back and say,
17 you know, it's a good idea in principle, but
18 we looked further at this. And we're more
19 convinced than ever that the job title
20 information, it's too vague, and we don't want
21 to. You know, so that may be your final
22 answer, Stu. I'm just giving a maybe look at

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1 it further.

2 MEMBER CLAWSON: Well, I guess
3 that is part of my question because I see at
4 other sites we have done both guiding job
5 titles.

6 DR. MAURO: And they parse it
7 pretty finally. For example, TBD 6000 parses
8 it really fine, you know. And I could see why
9 you wouldn't want to parse at that finding,
10 especially if the people could wear several
11 different hats.

12 In this case, though, if there was
13 ever a place where you would want to make a
14 parsing -- now, certainly if we could find out
15 a little bit more about what does it mean to
16 be a [Identifying Information Redacted] at this
17 facility --

18 MEMBER CLAWSON: I don't think you
19 really could call out a [Identifying Information
20 Redacted] because we have our [Identifying Information
21 Redacted] come right into our areas in
22 accidents.

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1 DR. MAURO: They're there eight
2 hours a day working next to the rods.

3 MEMBER CLAWSON: No. Actually,
4 when we had an accident was somebody involved
5 those. But they're actually coming right into
6 it. We have had some --

7 DR. MAURO: Get high doses?

8 MEMBER CLAWSON: Well,
9 contaminated and so forth. It's kind of an
10 interesting aspect. I guess my picture that
11 I was seeing was one side was dividing them
12 all down real fine, holding that, and then
13 this not -- maybe we didn't have enough
14 information or something like that. I don't
15 know. I'm just --

16 CHAIRMAN GRIFFON: Okay. I'll
17 just leave the action like that, then. Let's
18 -- want to go ahead onto the next finding,
19 John?

20 DR. MAURO: What number are we up
21 to?

22 CHAIRMAN GRIFFON: That would be

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1 149.4, because we just did 3.

2 DR. MAURO: Yes. Four is
3 non-penetrating, same issue, but now we're
4 talking non-penetrating. So it's the same
5 issue. In other words, in this particular
6 person, non-penetrating is --

7 CHAIRMAN GRIFFON: Okay. So they
8 overlap. Yes, I got you.

9 DR. MAURO: Yes. And it's the
10 same concept. You did exactly the same thing,
11 but non-penetrating.

12 MR. HINNEFELD: Your summary of
13 your finding doesn't read that way.

14 DR. MAURO: Yes. The summary dose
15 non-penetrating --

16 MR. HINNEFELD: The summary of the
17 finding is --

18 DR. MAURO: I'm sorry. I'm sorry.
19 I stand corrected. No. This finding -- I
20 thought I was saying that, use the 95th
21 percentile here. No, no, no. This was one of
22 those places where we asked the question. And

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1 it doesn't really apply to this person,
2 because they were compensated, but I do not
3 believe there's any provision in the exposure
4 matrix for direct deposition of uranium
5 particles on skin. This goes back to the
6 issue --

7 MR. HINNEFELD: That's the issue
8 we had a while with the Paducah case.

9 DR. MAURO: Exactly, exactly.

10 MR. HINNEFELD: Okay.

11 DR. MAURO: Now, it doesn't affect
12 this case, because it was compensated. This
13 is a cancer of the breast. So the positive
14 activity would have play. And as it stands
15 now, this goes to that generic issue when you
16 said that you think might be worried with the
17 generic analysis.

18 How do you deal with the person
19 with skin cancer, or I would say breast
20 cancer, perhaps, perhaps not testicular cancer
21 because the person is wearing clothes. But I
22 am more concerned about exposed skin, where

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1 there could be a particle deposited.

2 CHAIRMAN GRIFFON: So this is
3 deriving shallow dose from --

4 DR. MAURO: Shallow dose from
5 deposited material on the skin surface.

6 MR. HINNEFELD: So it's
7 essentially the same issue we had earlier,
8 because I mean, we could say that either it
9 doesn't matter in this case because this was
10 a compensable case anyway, or if we already
11 know it's on the generic list, or you refer to
12 --

13 CHAIRMAN GRIFFON: I'm going to
14 put it both ways, because it's kind of a
15 matrix finding this way that you're going to
16 develop this over-arching, but it doesn't
17 affect this case.

18 MR. HINNEFELD: Okay.

19 DR. MAURO: I'm looking at the
20 next ones. And you know, they all say the
21 same thing. And I'd have to go back to the
22 report and say, what's the difference between

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1 the 149.5 and 149.6? They're both talking
2 about the use of default values in the site
3 profile will likely result in a substantial
4 overestimate to this worker. I have to go
5 back. Let me pull the report and see what
6 that's about, see if it's here.

7 CHAIRMAN GRIFFON: You're on
8 149.5, and now you're looking --

9 DR. MAURO: Yes. I'm looking at
10 149.5, and just to see why --

11 MR. FARVER: 149.5 is external,
12 and 149.6 just deals with the internal.

13 DR. MAURO: Oh, okay. So we moved
14 it to internal. Okay. There you go. Okay.
15 149.5.

16 CHAIRMAN GRIFFON: Okay. So the
17 whole issue on 149.5 and .6 is the
18 overestimate --

19 DR. MAURO: As applied to this --

20 CHAIRMAN GRIFFON: It is too much
21 of an overestimate, right?

22 DR. MAURO: As applied to this --

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1 CHAIRMAN GRIFFON: We have the
2 same follow-up, right?

3 DR. MAURO: Yes, yes.

4 CHAIRMAN GRIFFON: Yes. Right.
5 Let me just copy and paste why I'm doing this,
6 and then get it right.

7 (Pause.)

8 CHAIRMAN GRIFFON: Okay. So we're
9 on the 150 now?

10 DR. MAURO: Yes.

11 CHAIRMAN GRIFFON: Okay. 150.1.

12 MR. HINNEFELD: Did we want to go
13 to the other Bridgeport Brass findings?

14 CHAIRMAN GRIFFON: Is there
15 different stuff at the bottom?

16 MR. HINNEFELD: I think there
17 might be more than just the couple we talked
18 about.

19 CHAIRMAN GRIFFON: Can we stay on
20 Bridgeport, John? Is that all right?

21 DR. MAURO: Sure. Where do we go
22 down to on that?

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1 MR. HINNEFELD: I think it's at
2 the very bottom of the matrix.

3 DR. MAURO: There it goes. Okay.

4 MR. HINNEFELD: And it's
5 Bridgeport's attachment 1.

6 DR. MAURO: Okay. What's the
7 number? Does it have a number?

8 CHAIRMAN GRIFFON: It's attachment
9 1, right?

10 DR. MAURO: I just have an
11 excerpt. Let me go sit over there with Doug
12 maybe.

13 CHAIRMAN GRIFFON: Yes. So it's
14 on page 55 on mine, maybe 54 on yours.
15 Fifty-five? Yes.

16 MR. HINNEFELD: Page 55.

17 CHAIRMAN GRIFFON: And this one,
18 yes, would benefit from additional analysis to
19 demonstrate -- do you have that one?

20 DR. MAURO: I have to say, I'd have
21 to read my -- to be able to --

22 CHAIRMAN GRIFFON: All right.

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1 Let's hold off on this.

2 DR. MAURO: Can we hold off on it?

3 CHAIRMAN GRIFFON: We won't even
4 get this far in the matrix by the end of the
5 meeting. So we'll come back to those next
6 meeting.

7 DR. MAURO: I am not prepared to
8 talk about the mini site profiles.

9 CHAIRMAN GRIFFON: One fifty.
10 We're on 150.

11 DR. MAURO: Okay. That's
12 Anaconda.

13 MS. BEHLING: Simonds Saw.

14 DR. MAURO: Okay. That's right.
15 Simonds Saw.

16 CHAIRMAN GRIFFON: We miss you at
17 these meetings, Kathy.

18 DR. MAURO: Kathy?

19 MS. BEHLING: Sorry I couldn't be
20 there.

21 CHAIRMAN GRIFFON: I'm sure you
22 are.

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1 (Laughter.)

2 CHAIRMAN GRIFFON: We don't
3 believe that.

4 DR. MAURO: Okay. Kathy, could
5 you help me out here?

6 MS. BEHLING: Page 3.

7 DR. MAURO: Yes. It's Simonds
8 Saw. I don't have it in front of me here.

9 CHAIRMAN GRIFFON: Page 4, yes,
10 finding 150.1 on the matrix.

11 MS. BEHLING: Okay. 150.1, method
12 for deriving internal doses not
13 claimant-favorable. Let's see.

14 DR. MAURO: Is this residual
15 period? This is residual. Is that right?

16 MS. BEHLING: Let me look. Yes,
17 this is the residual period. The method used
18 to reconstruct the doses to the organ of
19 concern due to the inhalation of re-suspended
20 residual activity appears to underestimate the
21 dose from this pathway by one order of
22 magnitude.

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1 DR. MAURO: Yes. Okay. I know
2 where we are.

3 MS. BEHLING: Okay?

4 DR. MAURO: We've been through
5 this before. This is the same old, same old.
6 You've seen it when you derive the activity on
7 surfaces. I believe, on Simonds Saw, there is
8 information on the amount of residual
9 activity.

10 On Simonds Saw, you have
11 information on the amount of residual activity
12 on surfaces based on those film badges that
13 were held, right? So from there, you could
14 back out and say, okay, how much contamination
15 would you have on surfaces that would give you
16 those readings on the film badges?

17 And I think that if you try to
18 back it out, the amount of activity per unit
19 area would be much higher than the default
20 value you folks have adopted in your Simonds
21 Saw dose reconstruction.

22 MR. HINNEFELD: Okay. Well our

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1 response, for what it's worth, is that the
2 re-suspension, which would be the function of
3 the average, you know, not the highest spot,
4 because people would be re-suspending the
5 things from throughout the day. And so my
6 understanding, from reading our response, is
7 that the re-suspension values were generated
8 from the average of those readings, rather
9 than from the highest reading.

10 DR. MAURO: I would agree with
11 that.

12 MR. HINNEFELD: That's my account.

13 DR. MAURO: Okay.

14 MR. HINNEFELD: At least that's the
15 way we read this.

16 DR. MAURO: Okay.

17 MR. HINNEFELD: The way I read our
18 finding, that seems to be what we interpreted
19 the difference to be.

20 DR. MAURO: Okay. Yes. I would
21 agree with you completely that, if you have an
22 estimation of the activity that's on surfaces,

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1 and its variable, in some places it's high,
2 in some places it's low, and you're trying to
3 determine what the low, whether it's external
4 exposure or its re-suspension, in both cases
5 I would say, yes, you're working from the
6 average as being the right place to work.

7 But I think my concern is that I
8 don't think there's parity between -- you
9 know, I think you predicted the level that's
10 on surfaces using the standard deposition
11 velocity approach. You know, that, about
12 0.00075 meters per second times the airborne
13 concentration, and you allow the radioactivity
14 to fall for some time period. In this case,
15 it might have been a year, which is pretty
16 conservative. So it's all coming back to me.

17 So I just have a problem with
18 that, as I've said on many occasions. The
19 whole approach to saying, if I know what the
20 airborne activity is in milligrams per cubic
21 meter or whatever units, then I apply this
22 deposition velocity of 0.00075 meters per

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1 second, which is a deposition velocity for
2 five micron particles, and then so you get
3 this rate that's falling, and that's, you
4 know, I think mechanistically it doesn't work
5 that way, especially in Simonds Saw, where
6 we're talking rolling operations with large
7 flakes. And we talked about this yesterday.

8 And so I would say,
9 mechanistically, that is not a good way to try
10 to get a handle on what might be on surfaces
11 during operations. Okay? Quite frankly, I
12 would have sooner gone with the film badge
13 that was hanging and see what reading that is
14 and what activity that would correspond to our
15 services that would you that radiation field.
16 I mean, it was five feet above the surface.

17 I would compare the two and say,
18 okay. If the two sort of came in close to
19 each other, then we are modeling approach.
20 And in reading, I would say I think you
21 probably are pretty robust. But if I came up
22 with, let's say, a ten times higher surface

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1 contamination from the film badges, I would
2 have been claimant-favorable, and went with
3 that.

4 And I think that that's -- you
5 know, if I had the report in front of me, I
6 think that I found that I came up with much
7 higher numbers if I were to use the film badge
8 data to get my surface activity.

9 MR. HINNEFELD: Well, it sounds
10 like, at the very least, we need a better
11 description of -- well, at least I need to
12 understand better where our number came from.
13 I think I understand where your number came
14 from, or I can probably read that in your
15 report.

16 DR. MAURO: Yes.

17 MR. HINNEFELD: And so we need
18 maybe some additional comparison there, and
19 maybe reconsideration of whether what you
20 adopted was right.

21 And now there's a second aspect of
22 this finding, I think, which is the

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1 re-suspension.

2 DR. MAURO: Well, that's the other
3 half.

4 MR. HINNEFELD: And that's, I
5 believe, on the global --

6 DR. MAURO: Right. That's a
7 global issue and we have a running discussion
8 where we think it should be closer to 10^{-5} .

9 MR. HINNEFELD: Yes.

10 DR. MAURO: And I think that, by
11 the way, we could benefit from yesterday's
12 conversation in that we -- we made a
13 distinction between the airborne activity due
14 to re-suspension that might be associated with
15 the operations time period, where the stuff is
16 very loose, people are walking around and
17 kicking it around, and clearly, under those
18 circumstances, 10^{-6} is not a good number.

19 But the argument was made by Jim
20 yesterday, and rightly so, but wait a minute,
21 we never use re-suspension. You know, during
22 operations, we use our best estimate of what

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1 the airborne level is from measurements of air
2 sampling or bioassay data.

3 We only use re-suspension factors
4 during the residual period. And during the
5 residual period, one could argue that the
6 radioactivity that's been deposited is less
7 re-suspendable. It's aged, and we would agree.
8 When you're dealing with -- even though it may
9 not have been cleaned up, but when it's aged,
10 and certainly if there's no anthropomorphic
11 activity, people, trucks, people, forklifts,
12 whatever, your potential to create re-suspended
13 material is diminished.

14 So we left it yesterday as
15 agreeing that, for the post-operation period,
16 but prior to decon, when you have residue, you
17 know, what do you use for your re-suspension
18 factor?

19 I would say it could certainly be
20 someplace between 10^{-6} and 5 times 10^{-5} . See,
21 5 times 10^{-5} is the value that's sort of been
22 widely accepted as a good re-suspension factor

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1 for a place where there's loose contamination,
2 it's fresh, and there's people walking around
3 reading higher than that.

4 And 10^{-6} , by the way, is a good
5 re-suspension factor for a place that's been
6 cleaned up. In other words, in fact, the NRC
7 recommends, when you are going through the
8 license termination process or licensed
9 facility, and you finish cleaning everything
10 up, and you do your survey, and you look for
11 residual radioactivity, your goal is to make
12 sure that, if someone were to occupy that
13 building at some time in the future, that
14 person would not get more than 25 millirem per
15 year. That's their cleaning criteria.

16 When making that determination,
17 they recommend using a re-suspension factor
18 once you, you know, you do your survey of
19 10^{-6} . So they are the first to say that 10^{-6}
20 probably is pretty good when you've cleaned
21 the place up.

22 And there really isn't very much

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1 removable contamination left. You certainly
2 don't have that in the situation you're
3 talking about now.

4 CHAIRMAN GRIFFON: Yes. I mean I
5 didn't really -- we did have this discussion
6 yesterday a little bit, but I mean, there's a
7 couple things I had, while I was sitting on
8 the phone thinking about that was, you know,
9 this aged idea. But also the -- I think we
10 have to be careful when we say that a
11 facility's post-operational time, because
12 these places -- we're talking about post-AWE
13 operation.

14 And a lot of them continued
15 operation. They just weren't doing covered
16 operations, you know? So you still have a
17 lot of activity and stuff, you know?

18 And then the other, I mean, there
19 are so many things in what you just said, but
20 the other side of it is, you know, back to my
21 old harping on these surveys at the end,
22 these decommissioning.

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1 Decommissioning in the '70s was a
2 lot different than decommissioning in the
3 '90s. And you know, I've cleaned up places
4 that the NRC cleared in the '70s.

5 They were cleared for free
6 release. And I was there for six years,
7 which I didn't mind. You know, getting paid
8 for it and doing a lot of work. But they had
9 a lot of contamination left. I'll tell you
10 that.

11 And you know, the questions raised
12 by the workers there at the time were, you
13 know, what do you mean that roof is totally
14 contaminated? We've put new rock on it like
15 every other year. Did we get exposed up
16 there?

17 And that's all in your, quote-
18 unquote, residual period, where if they use
19 the NRC report from 1978, I think in this
20 facility I'm thinking of, it basically said,
21 it's good to go, you know?

22 So I guess those two factors, but

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1 the one that I guess we can best get our
2 hands around is, when we say, you know,
3 post-operational, it doesn't mean like it was
4 moth-balled necessarily. It's not just
5 sitting there.

6 DR. MAURO: Yes. I mean, if you
7 think of it, if it's post-operative, the
8 license terminated, you've got some residual
9 radioactivity. And then all of a sudden, you
10 know, you still have people working there,
11 but not -- in other words, it's an AWE
12 facility, but you stop rolling uranium.
13 You're back to rolling steel.

14 We've been through this before,
15 you know, and I think there were methods that
16 were developed, for example, in Bethlehem
17 Steel, that seemed to work very well, because
18 as time went on, what happened was you had
19 the starting point. You had some residue of
20 uranium. But as time went on, you started to
21 add more and more metal residue, which
22 diluted it.

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1 So as time went on, you have a
2 slope. So you know your starting level, and
3 you know that, as time goes on, that's going
4 to be reduced.

5 Now here I don't know, for the
6 post-operation of Bridgeport Brass, what
7 happened after we -- you know, whether or not
8 -- I don't know.

9 MR. HINNEFELD: Well, they sent
10 the press to Ashtabula, but I don't -- so the
11 extrusion press they had been using for the
12 work was not enabling it. But I don't know
13 what went on in the evening, I just assume --

14 DR. MAURO: Or for Simonds Saw,
15 too. I mean, Simonds Saw -- so the method
16 that was used in Bethlehem Steel seems to
17 apply here. Here I think you came up with
18 some residual activity, and then applied the
19 10^{-6} re-suspension data. Well, in both cases,
20 I guess --

21 MR. HINNEFELD: There's a couple
22 of things here. There's resolution of this

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1 global issue of re-suspension, which would be
2 a precursor to solving the specific
3 application at Simonds Steel. And maybe it
4 will provide the specific application.

5 Here is the situation, this is
6 what you do. I mean, that sounds to me like
7 this is certainly dependent upon the
8 universal or the over-arching issue under
9 suspension.

10 And the solution may be at the
11 range, you know, based on the conditions,
12 this is what you do at that point would be
13 the appropriate application to this, which
14 would be another -- you know, that would be
15 subject to individual, site-specific
16 considerations. Until, you know, until that
17 is kind of put to bed, I think, or kind of
18 this won't go anywhere until we have kind of
19 a universal or a large --

20 DR. MAURO: I think OTIB-0070 is
21 the home for --

22 MR. HINNEFELD: Yes. And I think

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1 that's Jim's point, too, is that's where that
2 discussion should occur.

3 CHAIRMAN GRIFFON: But the other
4 side of it, I have as an action for you guys
5 to further consider the initial finding for
6 --

7 MR. HINNEFELD: Yes. I read that,
8 right.

9 CHAIRMAN GRIFFON: Okay.

10 MR. HINNEFELD: Well, the first
11 thing I've got to do is figure out the
12 sources of both numbers, because I just don't
13 know.

14 CHAIRMAN GRIFFON: Now, I haven't
15 put that in the procedures workgroup in the
16 past. NIOSH is developing a response to the
17 re-suspension issue.

18 Is that an official decision that
19 we've made, deciding that it's going to go in
20 TIB-70 discussions, and it's going to be
21 rolled into that or -- I haven't put that in
22 the past, because we've had this ongoing, as

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1 we all know.

2 MR. HINNEFELD: Well yesterday's
3 meeting was BB, appendix BB, and TIB 70. Is
4 that right?

5 DR. MAURO: No. Any issues
6 related to residual period, where you're
7 dealing with external exposure to surfaces,
8 contaminated and re-suspended inhalation of
9 material is a -- OTIB-0070 is here now. And
10 it addresses that, and it's different than
11 what's been done historically at other sites,
12 and other sites affected.

13 But now you've got OTIB-0070. And
14 we are engaged in a discussion on issues
15 related to OTIB-0070.

16 In my mind, once all the OTIB-0070
17 issues are resolved, I'm going to say,
18 everybody agrees, this is the right way to
19 go. I think that's the method that should be
20 applied universally to all the --

21 MR. HINNEFELD: Yes. That would
22 be my way of thinking, and so this is caught

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1 up in that, or --

2 DR. MAURO: It's caught up in
3 that.

4 MR. HINNEFELD: -- the issue
5 solution.

6 CHAIRMAN GRIFFON: So right now,
7 since, without going back and changing all
8 the last other matrices from white paper to
9 TIB 70, I'm going to leave it as white paper,
10 but if you guys come back saying, this has
11 been addressed in TIB 70, then all those
12 follow-ups will go away on this, on our
13 matrices. All right? Just maybe verify that
14 with Jim, or whoever.

15 DR. MAURO: Now, that's 150.1 you
16 just talked about?

17 CHAIRMAN GRIFFON: Yes.

18 DR. MAURO: Do you want to move on
19 to 150.2?

20 CHAIRMAN GRIFFON: Yes.

21 DR. MAURO: Okay. 150.2 is
22 ingestion, and I'm happy to say that the

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1 ingestion problem is solved. I don't know
2 who was here yesterday, but for the longest
3 time, there has been a fundamental
4 disagreement between SC&A and NIOSH on how do
5 you model inadvertent ingestion.

6 SC&A has been operating, you know,
7 based on reviewing OTIB-009 and digging into
8 its literature as best we can, which is the
9 generic protocol for ingestion, we thought
10 that fundamental to that method was the
11 assumption that the default ingestion rate
12 for hand-to-mouth activity, for sandwiches
13 that might get contaminated, was 0.5
14 milligrams per day, as being the quantity
15 that's ingested. And we took exception to
16 that for a number of reasons.

17 One, the EPA for inadvertent
18 ingestion recommends 50 milligrams per day
19 for an adult. NCRP 123 recommends 100
20 milligrams per day. And Jim has pointed out
21 on a number of occasions that both of those
22 -- when you go into the literature that's

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1 behind that, we find that is very poor. And
2 I would agree with him. In other words, the
3 way in which they came to the 15 to 100.

4 Even though it's become universal,
5 because everywhere you look, that's what
6 people use as a default value, Jim has
7 elected not to adopt that, and to go with 0.5
8 milligrams per days. No, no, I'm sorry. Jim
9 has elected not to do that and to do
10 something else. I did it again, right? I'm
11 glad you caught me -- and is doing something
12 else.

13 I thought that something else was
14 0.5 milligrams per day because we've tracked
15 down the literature, and we believe that he
16 was using RESRAD assumptions, which is 0.5
17 milligrams per day.

18 It turns out Jim corrected me
19 yesterday. He said, no, no, no, no, no.
20 We're using -- and I should have realized
21 this -- we're using 0.2 times the
22 concentration in the air as being the intake

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1 per day.

2 So for example, let's say you have
3 five milligrams. Let's talk in milligrams.
4 Let's say you have five milligrams per cubic
5 meter, okay, in the air, which is, by the
6 way, a pretty high number. It's the TLD for
7 dust. But it's not that high for the early
8 days of the AWE. In fact, I think we went up
9 to the hundreds of milligrams per cubic meter
10 at Bethlehem Steel.

11 Let's go with five. You multiply
12 that by 0.2, you get one milligram per day as
13 your ingestion rate. So in other words, your
14 method for deriving ingestion is to simply
15 take whatever the concentration is in the air
16 -- I'm using milligrams, but it could just as
17 well be Becquerels -- you multiply by 0.2,
18 and it gives you a number. 0.2 times 5 is 1.
19 You would get one milligram per day.

20 Once you get into the milligram
21 per day numbers, that is a lot more
22 reasonable, one to ten, because you could

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1 easily, if you go to any of these sites and
2 look at the airborne dust loadings that
3 correspond to, I guess, to 100 MAC, for
4 example, or 10 MAC, you're now in the range
5 of multiple milligrams per day. And that's
6 the kind of number for ingestion that I was--

7 CHAIRMAN GRIFFON: I thought Jim
8 was saying yesterday that it was based on the
9 surface contamination data that they had.

10 DR. MAURO: Yes, but in the end,
11 there's a whole story about this
12 hand-to-mouth, and they're licking their
13 hand. But what happens is what they do is,
14 it's the 0.2 rule. You know, if it turns out
15 --

16 CHAIRMAN GRIFFON: Where does this
17 0.2 value come from?

18 DR. MAURO: Well, that's where
19 they got it from. You know --

20 CHAIRMAN GRIFFON: I missed this
21 part of the call, yes.

22 DR. MAURO: It's pretty torturous.

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1 In other words, it took us a while, and we got
2 it wrong. Trying to figure out, how did you
3 get to the 0.2 number. In other words, you
4 take the 0.2, and you multiply by the dust
5 loading. And we try to track that down.

6 And it brought us to Charlie Yu
7 and RESRAD computer code with the 0.5
8 milligrams per day. So I seized upon that.
9 I have a lot of trouble. And then, in fact,
10 we had a part where we passed around a vial
11 containing 0.5 milligrams of sand, and you
12 hardly could see it. I mean, it's almost
13 invisible, and it's almost inconceivable that
14 it could be that small.

15 Jim corrected it. He says, no.
16 We're not making that assumption. We're
17 saying -- and you know, if it's a pretty
18 dusty environment, you could get many
19 milligrams per day as being the inadvertent
20 ingestion rate.

21 You know, this is one of those
22 areas where 0.5 was just too low, in my mind.

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1 Fifty was the number that I know that has
2 been the status quo for EPA.

3 So the real number in my mind is
4 some place certainly well above 0.5, because
5 0.5 is intuitively just too small when you
6 look at how much it is. And 50 might be too
7 high, because the literature upon which it is
8 based is flawed.

9 Well Jim ended up coming up with
10 numbers that are on the order of maybe a few
11 to maybe ten milligrams per day, depending on
12 the dust load.

13 And on that basis, and my sense is
14 that this issue is closed. So the method you
15 use, have adopted for your default approach
16 across the board, because you're using it
17 universally, is you come up with an airborne
18 dust loading.

19 Now given we agree that the
20 airborne dust loading is -- yes, that's a
21 good number. Using the 0.2 approach seems to
22 be --

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1 CHAIRMAN GRIFFON: I still don't
2 understand where the 0.2 is. It's just a
3 number that works, or --

4 MR. SIEBERT: There's various
5 conversion steps along the way.

6 CHAIRMAN GRIFFON: It ends up this
7 --

8 DR. MAURO: It ends up there.

9 CHAIRMAN GRIFFON: Is it
10 documented somewhere?

11 DR. MAURO: It's in OTIB-009.

12 CHAIRMAN GRIFFON: It is in OTIB-
13 009, somewhere in OTIB-009?

14 DR. MAURO: But you have to go
15 through the literature. You have to track it
16 down.

17 CHAIRMAN GRIFFON: Okay.

18 DR. MAURO: And we did that. So
19 anyway, what I can say is, you know, based on
20 the conversation we had yesterday, it seems
21 that, you know, Jim made a very convincing
22 argument that the 0.2 rule of thumb seems to

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1 work well.

2 CHAIRMAN GRIFFON: And what do you
3 do if you don't have air-monitoring data?
4 Are you just using --

5 DR. MAURO: You can't do it.

6 CHAIRMAN GRIFFON: Okay. So you
7 have to have air monitoring.

8 MR. SIEBERT: You have to have
9 some estimate of the air field, or if you
10 know what the activity -- now, if you know
11 what the activity is on surfaces, you don't
12 have --

13 CHAIRMAN GRIFFON: That's a --

14 MR. SIEBERT: Then you've got the
15 re-suspension problem, which is a different
16 issue.

17 CHAIRMAN GRIFFON: Yes, yes.

18 MR. SIEBERT: But you can get a
19 value in the air, and then the 0.2 will work.

20 DR. MAURO: And then apply it to
21 that.

22 CHAIRMAN GRIFFON: It will work as

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1 long as you buy how you do the re-suspension.

2 DR. MAURO: Bingo. You've got it.

3 So I mean, it's not all -- but I think there
4 is a breakthrough here. At least I would say
5 we are more than halfway home on the
6 ingestion in terms of, if you've got good,
7 claimant favorable dust loading, airborne
8 dust loading, to me, the 0.2 rule seems to
9 work.

10 Now, if you're coming up with your
11 airborne dust loading using a re-suspension
12 factor approach, 10^{-6} , then we've got a
13 problem. It may be low by a factor of ten or
14 more for the reasons we have mentioned on
15 many occasions. And that's a generic issue
16 that I think everyone has agreed --

17 CHAIRMAN GRIFFON: So this
18 ingestion issue is no longer going to be a
19 white paper? You're satisfied with TIB 9, is
20 kind of what you're saying?

21 DR. MAURO: Yes. I'm satisfied
22 with the 0.2 rule.

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1 CHAIRMAN GRIFFON: The explanation
2 of TIB 9?

3 DR. MAURO: Now that I understand
4 it, yes.

5 CHAIRMAN GRIFFON: But we still
6 have it as waiting for a NIOSH white paper.
7 Is NIOSH going to provide anything on that?
8 or are we just going to let that go? It
9 comes up in every matrix from like the first
10 one, I think.

11 MR. HINNEFELD: I guess.

12 CHAIRMAN GRIFFON: I think it
13 might be worthwhile to produce something that
14 says -- explains better what's in TIB 9.

15 MR. HINNEFELD: Better than TIB 9?

16 CHAIRMAN GRIFFON: Well, it just
17 explains, you know, maybe lays out a sample
18 calculation or something that people can
19 follow through, because obviously if they
20 have trouble following it -- you know, it's
21 been on the public record for a while. I'm
22 just saying, if we just dismiss it now, it

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1 would look funny. Is that --

2 MR. HINNEFELD: I'll find out.

3 CHAIRMAN GRIFFON: Yes,
4 understanding that SC&A seems to be fine with
5 the bottom line at this point. So it's
6 really just an explanation of what you're
7 already doing, I guess, you know.

8 MEMBER MUNN: So Mark, you want
9 this to go where?

10 CHAIRMAN GRIFFON: I'm saying that
11 NIOSH is going to -- just to satisfy past
12 actions, NIOSH is going to develop a -- we'll
13 call it a white paper, but it's really just
14 to explain what's in TIB 9 maybe just a
15 little more with a sample calculation or
16 something so that it will explain what John's
17 just sort of outlined here.

18 And I'm going to indicate that,
19 you know, SC&A appears to be satisfied with
20 this explanation, but we want it documented.
21 That's all we're waiting on.

22 MEMBER MUNN: Yes, yes. I

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1 understand.

2 CHAIRMAN GRIFFON: Yes, yes.

3 MEMBER MUNN: I was just asking
4 where it's going to land, what it's going to
5 be attached to so that, the next time,
6 re-suspension factors, and how many times
7 people --

8 CHAIRMAN GRIFFON: Right, right,
9 right.

10 MEMBER MUNN: -- that comes up,
11 which it will do within the next 24 hours for
12 sure.

13 CHAIRMAN GRIFFON: Yes. I've got
14 you. I've got you.

15 MEMBER MUNN: We know where that
16 white paper is going to land, and we can all
17 say it in chorus.

18 CHAIRMAN GRIFFON: Yes, I follow
19 you.

20 DR. MAURO: It's important to make
21 a distinction between the re-suspension
22 factors --

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1 CHAIRMAN GRIFFON: Yes. This is
2 ingestion.

3 DR. MAURO: -- and the ingestion.

4 CHAIRMAN GRIFFON: This is
5 ingestion, yes.

6 MEMBER MUNN: Right.

7 DR. MAURO: I think ingestion,
8 we're almost home free. I think maybe some
9 documentation of, no, it's not 0.5 milligrams
10 per day.

11 CHAIRMAN GRIFFON: Let me ask, on
12 the procedures subcommittee, have we reviewed
13 TIB 9?

14 DR. MAURO: We did.

15 CHAIRMAN GRIFFON: And was it
16 pending this?

17 DR. MAURO: Yes. In TIB 9, we
18 have issues related to re-suspension factor
19 and inadvertent ingestion. And I think we're
20 really making some nice progress on the
21 inadvertent ingestion.

22 CHAIRMAN GRIFFON: So I'm going to

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1 say this is going to end up in your
2 subcommittee, Wanda, to answer your question.

3 Yes.

4 MEMBER MUNN: Yes. I gathered
5 this is --

6 CHAIRMAN GRIFFON: Right.

7 MEMBER MUNN: -- which is one of
8 the reasons why I'm trying to be specific
9 about words. I already know it's going to be
10 in my lap, but where in my lap.

11 DR. MAURO: And I think it's going
12 to be nicely trapped.

13 CHAIRMAN GRIFFON: Related to TIB
14 9. It will be a white paper. Yes.

15 MEMBER MUNN: All right. We
16 undoubtedly have some action item.

17 CHAIRMAN GRIFFON: Yes.

18 MEMBER MUNN: But given the
19 current state of my electronics, I'm not even
20 going to try to look at it.

21 CHAIRMAN GRIFFON: Okay. Go
22 ahead, John. I'm sorry. I just wanted to

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1 get that down.

2 DR. MAURO: We're up to -- well,
3 it looks like that was 151 and 152.

4 CHAIRMAN GRIFFON: Yes.

5 DR. MAURO: That's it. Now we're
6 up to 151. I'm not sure what 151 is. Do you
7 know what site that is?

8 MEMBER MUNN: We are on 152.1.

9 DR. MAURO: I see 151.1.

10 CHAIRMAN GRIFFON: No. We are on
11 151.1. We were just on 150.1 and 150.2.

12 DR. MAURO: 151 is Anaconda.
13 Okay. I've got it. Anaconda --

14 MR. SIEBERT: You were just ahead
15 of us.

16 CHAIRMAN GRIFFON: Yes.

17 DR. MAURO: You know, somehow I
18 had Anaconda in my head. And I read Anaconda
19 during the lunch break, and I'm ready to talk
20 about it. This was a person that was denied
21 using OTIB-004, as opposed to the Anaconda
22 site profile, because I believe the Anaconda

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1 -- I guess it's an appendix, perhaps to TBD
2 6000.

3 MR. HINNEFELD: That's probably
4 true.

5 DR. MAURO: So I think Anaconda is
6 an appendix of TBD 6000. It was not
7 available to the dose reconstructors at the
8 time.

9 MR. SIEBERT: It was done well
10 before that, yes.

11 DR. MAURO: So and this was a
12 person where you placed an upper bound using
13 OTIB-004, and denied, which is exactly what
14 the purpose of OTIB-004 is, to place an upper
15 bound in denial.

16 When we reviewed this, I think
17 that the external exposure and internal
18 exposure, we agree -- and I wish I had it in
19 front of me. In other words, you basically
20 followed OTIB-004, and we agreed that OTIB-
21 004 is certainly bounding for external
22 exposure, because you are assuming a person

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1 is up close and personal, I think to the
2 source, for a protracted period of time, and
3 it really places another bound on external
4 exposure.

5 And I believe on internal exposure
6 you assume the person is continuously exposed
7 to 100 MAC of airborne dust loading --

8 CHAIRMAN GRIFFON: Right.

9 DR. MAURO: -- extremely
10 conservative. So from that point of view,
11 you certainly place an upper bound. For the
12 residual period, we're right back where we
13 started again. It's not important, though.

14 In other words, though we comment,
15 and that's the two comments here, we have a
16 comment on exposure to surface contamination.
17 That's 51.1. And 51.2, we have a comment on
18 ingestion. The ingestion problem has gone
19 away.

20 The external exposure to surface
21 contamination, you know, in our mind, it's
22 still a problem. That is, the way you come

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1 to that number. But in this case, I'll say
2 it.

3 You know, you deny, but you know,
4 you can really increase that pathway, let's
5 say. It's not going to change anything. By
6 far, the exposure from operations drives this
7 thing.

8 CHAIRMAN GRIFFON: All right. So
9 we'll leave it as a finding. It won't affect
10 this case kind of thing.

11 DR. MAURO: Yes. 151.1 won't
12 affect the case --

13 CHAIRMAN GRIFFON: Right.

14 DR. MAURO: -- but it's still an
15 issue that needs to be resolved.

16 MR. HINNEFELD: Now, 151.1 I
17 believe is the issue about how the
18 contamination, the starting contamination --

19 DR. MAURO: Surface contamination.

20 MR. HINNEFELD: -- the residual
21 period, surface contamination, is generated
22 --

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1 DR. MAURO: Is generated.

2 MR. HINNEFELD: -- from the
3 deposition pattern. And that's on the books
4 somewhere, right? Is that on a generic or
5 over-arching, or is that in TIB 70, or --

6 DR. MAURO: I think that's one of
7 the steps in TIB 70.

8 MR. HINNEFELD: Okay.

9 DR. MAURO: It starts with that.
10 That is, the thing with TIB 70 is, one of the
11 starting points, as you know, with the
12 activities on the surface, because you may
13 have mentioned it during operation, and now
14 we're into a post-operation period, and you
15 have to assign a slope to it, because it will
16 start to decline with time.

17 MR. HINNEFELD: Right.

18 CHAIRMAN GRIFFON: I'm not sure.
19 Does TIB 70 talk about the original
20 derivation of the --

21 DR. MAURO: I think it gives you
22 different cases. If you know this.

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1 CHAIRMAN GRIFFON: Yes.

2 DR. MAURO: But how you get to
3 that, I don't think TIB 70 tells you how you
4 can get to the --

5 CHAIRMAN GRIFFON: Right. I think
6 --

7 DR. MAURO: Yes. That is an
8 operational --

9 CHAIRMAN GRIFFON: You've got six
10 specific -- yes.

11 MR. HINNEFELD: This has come up,
12 this finding about --

13 CHAIRMAN GRIFFON: Yes. We just
14 had it last case, yes.

15 MR. HINNEFELD: I mean, that seems
16 to me like that is one broad thing to be
17 resolved. You know, if you do it once, you
18 know. Yes.

19 DR. MAURO: Well, I would say when
20 it comes to residual contamination of
21 surfaces at AWE facilities in the early
22 years, -- that's what I'm talking about --

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1 there has been a lot of work done between
2 Kingsley --

3 MR. HINNEFELD: Oh, yes.

4 DR. MAURO: -- and also the Adley
5 paper. They have information on how much --
6 and it's a lot of residual radioactivity.
7 And there is a lot of data on that.

8 If you were to say, "We are going
9 to use that generic upper bound," if you look
10 at the Adley paper, it is by far the best
11 one. This is a report that was put out, AEC
12 1952. It has the citations.

13 There is all this incredible
14 amount of data on what it was like in a
15 uranium-handling facility back in the late
16 1940s, early 1950s. They did a tremendous
17 amount of research characterizing the
18 airborne activities, the deposition rates on
19 the surfaces.

20 I think if you use that as a
21 generic starting point, okay. We are going
22 to assume that at the time of termination of

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1 operations, this is the residual activity, an
2 upper bound estimate of what might have been
3 on surfaces at an AWE facility that we don't
4 have very much data for.

5 If you have data, great. Use it.
6 But if you don't have data, you would apply,
7 I would say, the Adley report starting point.

8 And then you trigger in okay.
9 OTIB 70. What happens in time? And how are
10 you going to get a slope on that? Right now
11 OTIB 70 says you pick some point out in the
12 future when you've got some measurements.
13 And if they're good measures, let's say, all
14 of a sudden it's 1978, and you've got some
15 FUSRAP. And you know there wasn't any D&D between the
16 time they shut down, let's say,
17 1960, and the FUSRAP characterization. Let's
18 say, 1978. You've got two points, you know.
19 You've got your slope, you know.

20 And that is one option you have
21 available to you under OTIB 70. OTIB 70
22 gives you a lot of options because sometimes

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1 you don't have that point. And you have to
2 say, "Well, what slope do you use?"

3 One of our criticisms of OTIB 70
4 is you use, I think it was, one percent a
5 day, the rate at which it goes down. We've
6 got a real problem with that.

7 CHAIRMAN GRIFFON: I put that in
8 there, then, Stu, in terms of follow-up, you
9 know, that you might want to consider the
10 Kingsley and Adley. Is it A-d-l-e-y?

11 DR. MAURO: A-d-l-e-y.

12 CHAIRMAN GRIFFON: A-d-l-e-y.

13 DR. MAURO: It's AEC 1952
14 citation. I have all of that stuff. You
15 have it. Jim has it. Jim is very familiar
16 with the report.

17 CHAIRMAN GRIFFON: Okay.

18 DR. MAURO: And that is 151.1.

19 CHAIRMAN GRIFFON: I think that
20 is, yes. And this is a little different than
21 Simonds Saw because in that case, you know,
22 it's the same question, but you have film

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1 data, too, you might want to consider. You
2 have site-specific data there.

3 DR. MAURO: We're on Anaconda now.

4 CHAIRMAN GRIFFON: I know. I
5 know. But I'm just saying it's not the exact
6 same action, necessarily.

7 DR. MAURO: Yes. Right.

8 CHAIRMAN GRIFFON: I mean, but
9 it's up to them to decide how they want to
10 approach it.

11 DR. MAURO: See, to me, whenever
12 you have a question "Are data good enough?"
13 you can always go to Adley. And Adley has
14 got some incredible data, and they are high.
15 The numbers are high.

16 CHAIRMAN GRIFFON: All right.
17 Going on to 152, John.

18 DR. MAURO: I think that leaves my
19 territory.

20 CHAIRMAN GRIFFON: Okay. 152 is
21 moving on to one of your sites?

22 MR. FARVER: Savannah River site.

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1 DR. MAURO: Okay. You got it.

2 MR. FARVER: You are off the hook,
3 John.

4 DR. MAURO: Thank you.

5 MR. FARVER: Here I am on the
6 hook.

7 CHAIRMAN GRIFFON: Good thing you
8 studied during lunch.

9 DR. MAURO: Yes. That's why I was
10 here.

11 MR. FARVER: 152.1, Savannah River
12 site case. The employee was an inline
13 mechanic, worked there from '52 through '83,
14 so for several years. And the concern was
15 the difference between some of the dose
16 records. And we did a couple of exhibits in
17 our report, some of the handwritten dose
18 records as they were kept compared to the
19 HPAREH -- is that how you say that, HPAREH?
20 -- report.

21 And although the differences are
22 not large, there are some differences. And

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1 we are just reporting that there were
2 differences.

3 Now, in some cases you are looking
4 at maybe ten millirems. Some of it came from
5 -- I believe, the handwritten cards are
6 difficult to read. And they were added
7 incorrectly, which in some cases is not
8 always picked up in the HPAREH report.

9 So we just wanted to bring it to
10 your attention that there are differences.
11 That is the gist of first finding.

12 MEMBER MUNN: This doesn't
13 properly account for all photon doses.

14 MR. FARVER: That's correct. In
15 other words, there are handwritten dosimeter
16 cards. And then there is the
17 computer-generated report. And they do not
18 always have these same numbers.

19 MEMBER MUNN: And so the dose
20 reconstruction report doesn't have the same
21 numbers as the raw data? Is that what you're
22 saying?

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1 MR. FARVER: Correct. That is
2 what I am saying. I believe that the policy
3 to follow the HPAREH report, that that is the
4 dose reconstructor policy.

5 MEMBER MUNN: Are you saying the
6 HPAREH report does not agree with the raw
7 data?

8 MR. FARVER: In some cases,
9 correct.

10 MEMBER MUNN: Right, right. Okay.
11 Now, that's all.

12 MR. HINNEFELD: Doug, I'm not sure
13 when there is a disagreement between HPAREH
14 and the cycle data, our thought, we thought
15 that we would pick higher. But it isn't in
16 this case, clearly.

17 MR. SIEBERT: That is what we're
18 saying, that we did use the HPAREH dose,
19 rather than cycle data. And it could be an
20 underestimate, which seems to indicate to me
21 we're saying that maybe we should use the
22 larger of the two.

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1 MR. FARVER: Okay. I just wasn't
2 sure if you were just following the --

3 MR. SIEBERT: Generically from my
4 mind, when they're not horrendously different
5 and we can't find the difference, we'll go
6 with the larger of the two. If there's a
7 huge difference, then we'll be doing a lot
8 more investigation as to why.

9 MEMBER MUNN: And how significant
10 were the differences?

11 MR. FARVER: We are looking at
12 differences of ten millirem in one case.

13 MR. SIEBERT: Ten to 20 millirem
14 here and there.

15 MR. FARVER: Twenty millirem here
16 and there.

17 MEMBER MUNN: A year or individual
18 doses, what?

19 MR. SIEBERT: The HPAREH is on a
20 yearly basis.

21 MR. FARVER: It would be a year.

22 MEMBER MUNN: Okay.

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1 MR. FARVER: So it's not very
2 significant doses. It's just mainly to point
3 out that there were discrepancies between the
4 two records.

5 MEMBER MUNN: Right.

6 CHAIRMAN GRIFFON: Well, let me
7 clarify something, though. I thought from
8 your response -- oh, I see what you said.
9 You said that this could possibly result in
10 underestimate.

11 I guess the question is, is that
12 policy being used, the one you just
13 described, where you're saying that they'll
14 use the higher of the two? If that's the
15 case, then that's fine.

16 MR. SIEBERT: Sure. They can
17 verify it.

18 CHAIRMAN GRIFFON: Yes. And
19 either way, I think the bottom line for this
20 case is either way, it wouldn't have affected
21 the outcome of the case. But you do want to
22 know if they were following the procedure.

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1 That's another question in the process.

2 MEMBER MUNN: It is of interest,
3 too, that only two years. I am not familiar
4 with the HPAREH report. Does that report
5 exist for all of the covered years or for all
6 of the years of operation or is it limited to
7 --

8 CHAIRMAN GRIFFON: It extends away
9 --

10 MR. HINNEFELD: Wanda, I don't
11 know if it continues to present today, but it
12 starts way back and goes pretty late.

13 CHAIRMAN GRIFFON: Yes.

14 MR. HINNEFELD: It goes into the
15 '90s.

16 CHAIRMAN GRIFFON: Into the '90s
17 at least, yes, I think late '80s or '90s, I
18 think.

19 MEMBER MUNN: Okay. And so this
20 is a very comprehensive database that you're
21 using here?

22 MR. HINNEFELD: Yes.

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1 MEMBER MUNN: That you are using
2 here?

3 MR. HINNEFELD: Yes.

4 MEMBER MUNN: And what I think I
5 have heard is that all was being pointed at
6 as if they are small discrepancies, not
7 particularly significant ones, between the
8 raw data and, at least for these two years,
9 the HPAREH report?

10 MR. FARVER: Correct.

11 MEMBER MUNN: Right? Yes.

12 MR. FARVER: In this case they are
13 small differences. I can't say that for
14 every case. I just know there are
15 differences.

16 MS. BEHLING: This is Kathy. I
17 have seen, at least from many of the cases
18 that I have reviewed on the Savannah River
19 site, generally there is a comparison because
20 it's put into their workbook.

21 And I think initially there is a
22 data group that enters all of this weekly and

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1 biweekly and monthly data. And then the dose
2 reconstructor actually compares that and
3 makes a comparison to the summary data.

4 And generally, in fact, I know
5 that there are some dose reconstructors that
6 even will highlight when they find a
7 discrepancy if they will use the higher dose.
8 And they will highlight that with a red, in
9 red, so that it's clear this was dose that
10 was added so that the individual monthly,
11 weekly dose adds up to the summary dose if
12 that summary dose was higher.

13 So I think in general, that the
14 comment that you have made regarding using
15 the higher dose is what I have seen in the
16 past that they used higher.

17 MEMBER MUNN: Yes. Okay. What
18 this boils down to essentially, for the
19 uninitiated, appears to be possibly even
20 human error in recording of data, which we
21 all know occurs on a regular basis -- we
22 can't overcome that -- but that it has been

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1 checked by the dose reconstructor and the
2 appropriate claimant-friendly dosage is used
3 as a matter of course. Am I interpreting
4 that correctly?

5 CHAIRMAN GRIFFON: Well, except
6 for the last part.

7 MR. HINNEFELD: The last part,
8 Wanda.

9 CHAIRMAN GRIFFON: That's what we
10 are following up on.

11 MR. HINNEFELD: That's what we
12 have to follow up on, whether the policy is
13 to use the higher value when you have these
14 fairly small discrepancies.

15 CHAIRMAN GRIFFON: And I think
16 Kathy said in general she is seeing that, but
17 for this case, we're not sure. So we're
18 going to at least follow up.

19 MEMBER MUNN: Okay.

20 CHAIRMAN GRIFFON: Let's go on to
21 the next one.

22 MR. FARVER: Next finding. Okay.

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1 Improperly converted photon doses to organ
2 doses.

3 MR. SIEBERT: This is the usual --

4 MR. FARVER: This is the usual one
5 that we have been putting in about when they
6 combine distributions of the dose conversion
7 factors, which has been corrected and the
8 current EDCW workbook. So this is finding 2
9 and finding 3 have been corrected.

10 Now finding 4.

11 CHAIRMAN GRIFFON: Hold on. I was
12 catching up there, Doug. So 152.2, where are
13 we at?

14 MR. FARVER: 2.2 and .3 have
15 already been corrected. It's a workbook type
16 of situation in the Savannah River workbook.

17 CHAIRMAN GRIFFON: Oh, yes.

18 MR. HINNEFELD: There is no
19 Savannah River workbook. The entire --

20 MR. FARVER: And you will see this
21 come up, even in the next case.

22 CHAIRMAN GRIFFON: So this has

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1 been revised in TIB 12, right? Is that --

2 MR. HINNEFELD: I think that's
3 what it is. But yes, it's --

4 MR. SIEBERT: No. It's in the new
5 tool itself. Rather than using the max and
6 min, it uses the actual --

7 CHAIRMAN GRIFFON: Got you.

8 MR. HINNEFELD: The AP range.

9 MR. SIEBERT: Correct.

10 MR. HINNEFELD: Yes, that's what
11 it -- and this particular claim came back.
12 And so it got reworked with the correct
13 worksheet, you know, the correct workbook
14 after -- or it will be reworked. I don't
15 know right now.

16 MR. KATZ: Stu, you disappeared.

17 MR. HINNEFELD: Oh, I disappeared?

18 MR. KATZ: Yes.

19 MR. HINNEFELD: Sorry. This case
20 either has been or will be reworked with the
21 correct Savannah River workbook because it
22 came back to us for rework because one of the

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1 PERS.

2 CHAIRMAN GRIFFON: PERS. Okay.

3 MR. SIEBERT: Yes. We presently
4 have it.

5 MR. HINNEFELD: Do we have it?
6 Okay.

7 CHAIRMAN GRIFFON: Okay. And
8 that's for .2 and .3?

9 MR. FARVER: Correct.

10 MR. HINNEFELD: Yes.

11 MS. BEHLING: Let me ask a
12 question there. When a change is made to a
13 workbook, as in this case, is there any kind
14 of a PER process that goes on? Because I
15 think in this particular case, like for
16 especially things like breast cancer, I think
17 it can have something of a significant impact
18 if I am remembering correctly.

19 I just wondered, like when you
20 make changes to your procedures, when you
21 make changes to a workbook, do you go back
22 and look at cases or not?

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1 MR. HINNEFELD: Well, by and
2 large, a change to a workbook occurs because
3 of a change to a procedure. Isn't that
4 right?

5 MS. BEHLING: Not in this case.

6 MR. HINNEFELD: Well, they didn't
7 in this case, but, by and large, that is what
8 happens. I mean, the workbooks are supposed
9 to faithfully reproduce the technical
10 guidance that's in the technical documents.

11 And so to that extent, then other
12 than maybe you can make some selection items
13 more readily accessible and make the
14 selections easier, I wouldn't think there
15 would be a lot of changes to the actual
16 calculation of a workbook unless there were a
17 concomitant change or an associated change.
18 But it's a technical document that describes
19 this is the calculation method you use.

20 So I wouldn't think it would occur
21 very often, but I know in this case it was
22 not. It was strictly a workbook change.

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1 MS. BEHLING: Okay.

2 MR. HINNEFELD: Scott is looking
3 for something here.

4 MR. SIEBERT: I know we did
5 actually review all of the cases that were
6 used with that tool for the impact of this.
7 I am just --

8 MS. BEHLING: Okay. That was my
9 question.

10 CHAIRMAN GRIFFON: That was the
11 question.

12 MR. SIEBERT: Yes. I know we did.
13 I am just trying to figure out if I can find
14 documentation as such.

15 CHAIRMAN GRIFFON: That's a good
16 question, though. And, Doug, pick it up on
17 152.4 when you're ready.

18 MR. FARVER: 152.4. The finding
19 was that the report does not account for all
20 the recorded dose. And this has to do with,
21 if you look at the HPAREH report, in the
22 later years, there's a column for tritium.

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1 And they'll report tritium doses, which are
2 not always the same doses that are calculated
3 from tritium bioassays.

4 And it has to do with how they
5 determine their tritium exposures for
6 personnel monitoring for -- I don't know what
7 to say, but they use their external dosimetry
8 to regulate their exposures to tritium, I
9 guess is one way to say it.

10 And so what we are pointing out
11 there is a couple of discrepancies between
12 what is in the HPAREH report and what was
13 used for the dose assessment. It has to do
14 with subtracting out tritium. It's not
15 stated anywhere.

16 And, really, we just suggest that
17 they document what they do. In other words,
18 if you are going to pull out about 70 percent
19 of the dose and call it tritium, just
20 document it somewhere, like in the technical
21 basis.

22 CHAIRMAN GRIFFON: But you are

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1 saying here to -- well, it's hard with the
2 summary finding sometimes, but --

3 MR. FARVER: Right. That's why
4 I'm looking at the report.

5 CHAIRMAN GRIFFON: -- the DR
6 report does not account for all the recorded
7 dose.

8 MR. FARVER: Right. That's why
9 we're looking at the report.

10 CHAIRMAN GRIFFON: The DR report
11 does not account for all the recorded dose.
12 What you just said --

13 MR. SIEBERT: That was initially
14 the finding because it was thinking that the
15 tritium dose was actually photon dose. And
16 if you thought that, then you thought we
17 didn't do all of the photon.

18 CHAIRMAN GRIFFON: Okay.

19 MR. FARVER: Well, if you look at
20 an HPAREH report, the values that are in that
21 report are not always the values that are --
22 how shall I say it? Okay.

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1 MR. SIEBERT: In HPAREH, they are
2 all lumped together as external because
3 Savannah River just considered tritium
4 external because it was whole body.

5 And if you just look at HPAREH,
6 look at 100 millirem, you would immediately
7 think it is 100 millirem photon. The 70
8 might be from tritium.

9 And we actually have to pull that
10 out when we do the external and then --

11 CHAIRMAN GRIFFON: How do you pull
12 it out?

13 MR. SIEBERT: Just subtract it out
14 in the tool.

15 CHAIRMAN GRIFFON: But how do you
16 know what percentage or whatever?

17 MR. SIEBERT: Because in the cycle
18 data --

19 CHAIRMAN GRIFFON: In the cycle
20 data, it's there? Okay.

21 MR. SIEBERT: Yes. It shows the
22 difference.

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1 CHAIRMAN GRIFFON: That's what I
2 was trying to --

3 MR. SIEBERT: They added that in.

4 MR. FARVER: Now, we have included
5 a couple of exhibits in there. For example,
6 if you look at the dosimeter card for 1975,
7 there is a 195-millirem deep dose,
8 210-millirem shallow dose, and 455 for
9 tritium. If you look at the HPAREH for 1975,
10 it's 670 deep dose or maybe I've got that
11 backwards. I've got that backwards.

12 The HPAREH is the lower value.
13 And the dosimeter card is 640 deep, instead
14 of the HPAREH's 195 deep. So they subtracted
15 out 455 millirem and called it tritium.

16 MR. SIEBERT: Which is in HPAREH
17 under the tritium column.

18 MR. FARVER: Which is in HPAREH
19 under the tritium column, but it's not in the
20 dosimeter card, the handwritten card. And
21 all we're suggesting in -- I understand what
22 you do because basically I know what they did

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1 there, but you should probably document it
2 because I don't know that it's documented
3 anywhere in a technical basis that that is
4 how you handle the tritium result. And it
5 could lead people to ask questions.

6 CHAIRMAN GRIFFON: Doug, when you
7 say, document, document where?

8 MR. FARVER: You can put it in the
9 external basis for Savannah River, something
10 like that.

11 CHAIRMAN GRIFFON: Okay. Does
12 NIOSH agree with that or --

13 MR. HINNEFELD: Well, sitting here
14 it sounds reasonable.

15 CHAIRMAN GRIFFON: Yes, yes, yes.
16 I think I would want to go make sure that
17 there is not something better that people
18 would know --

19 MR. FARVER: And what this leads
20 to is when you look at the HPAREH report and
21 you see these tritium results, let's say it
22 says 455 millirem per tritium in 1975.

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1 Now later on we might calculate a
2 tritium dose for this person based on
3 bioassay samples, which may or may not equal
4 455 millirem. It might equal ten millirem.
5 So how do you explain that? I want to please
6 explain it somewhere. So it's just a
7 suggestion to eliminate some questions.

8 I don't remember if it was used in
9 lieu of bioassay. I don't believe it was. I
10 believe it was used as a more real-time way
11 to control exposure.

12 MR. HINNEFELD: What are you
13 talking about, in HPAREH, you mean?

14 MR. FARVER: No. On the external
15 dosimetry part because I know they subtracted
16 it out from the TLD when the TLDs were read.
17 I think the TLDs were read more frequently
18 for tritium people.

19 MR. HINNEFELD: I don't recall.

20 CHAIRMAN GRIFFON: That was sort
21 of my follow-up. A follow-up question I have
22 is --

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1 MR. FARVER: If it's used in lieu
2 of bioassay data to control exposure.

3 MR. HINNEFELD: Oh, what Savannah
4 River did, yes.

5 MR. FARVER: Yes, Savannah River.

6 MR. HINNEFELD: Yes. I think they
7 had set intakes based on bioassay. You know,
8 they set doses based on the model that was
9 applicable at the time.

10 MR. FARVER: That's what I
11 believe, but I believe the TLDs were read
12 more frequently and gave a more real-time --

13 MR. HINNEFELD: Well, that could
14 be real-time, but I think what they chose to
15 reflect in HPAREH was the dose that counts
16 towards the person's 5 rem a year exposure
17 because the tritium as the whole body dose
18 would be directly additive to the photon
19 dose. And so that is essentially the
20 demonstration of compliance with the data,
21 the five rem exposure limit.

22 MR. FARVER: Okay.

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1 MR. HINNEFELD: I would think that
2 is why they would incorporate it there.

3 CHAIRMAN GRIFFON: Yes. They just
4 add the two of --

5 MR. HINNEFELD: Yes.

6 MR. FARVER: That's okay. I just
7 don't remember reading that anywhere in any
8 of your documentation.

9 MR. HINNEFELD: Well, I don't know
10 that I have ever read that. I just would
11 suspect it. Why in the world would somebody
12 do that? I would say that would be it.

13 CHAIRMAN GRIFFON: Yes.

14 MR. HINNEFELD: You have got all
15 the whole body dose in one place.

16 CHAIRMAN GRIFFON: It's all whole
17 body dose.

18 MR. HINNEFELD: It's all whole
19 body dose. And you --

20 MR. SIEBERT: Savannah River is
21 not the only one. I know that across the
22 complex, there were other places that thought

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1 of tritium as a whole body dose --

2 MR. HINNEFELD: Yes.

3 CHAIRMAN GRIFFON: Yes.

4 MR. SIEBERT: -- even though
5 that's internal, rather than external.

6 CHAIRMAN GRIFFON: Right.

7 MR. HINNEFELD: Not going to be as
8 effective a dose, which now is, of course,
9 out of date.

10 MR. FARVER: So that was 152.4.
11 152.5 is the dose conversion factor for
12 neutron doses to organ dose.

13 CHAIRMAN GRIFFON: Same thing as
14 .2, right?

15 MR. FARVER: Yes. That one has
16 been taken care of previously by 152.2.

17 152.6 has to do with the ongoing
18 internal dose from fission products. And I
19 am going to ask, Kathy, if you could help me
20 out on this.

21 MS. BEHLING: Okay. This is just
22 the finding that we have all talked about

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1 many times before, but I guess in calculating
2 missed fission product dose, NIOSH uses a
3 radionuclide chooser tool. And they select
4 the radionuclide that will provide the
5 highest dose.

6 I guess our comment is that is
7 fine. And we don't dispute that, but what
8 about the dose from other radionuclides,
9 other potential missed radionuclides? And
10 there is a list of the various radionuclides
11 in table D2 of the Savannah River site.

12 So this has been a very common
13 question. The only thing that -- and I guess
14 Stu can explain this better, but in the
15 response, if I'm reading this correctly, it
16 almost sounds like the radionuclide chooser
17 tool actually does incorporate contributions
18 from the other radionuclides.

19 If that is the case, then that
20 would resolve this finding, but I am not sure
21 I quite understand the response.

22 MR. HINNEFELD: Yes. I am not

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1 sure I am really conversant with this, but
2 I've got some general --

3 MR. SIEBERT: Well, what the
4 response is saying is the chooser includes
5 all of those radionuclides for the decision
6 as to which is the most claimant-favorable.

7 And then we determine from that
8 the most claimant-favorable, just as you
9 said. It's consideration as to which ones to
10 assign, not assigning the largest one and all
11 the other ones as well.

12 MR. HINNEFELD: Yes. And there is
13 a lot that goes into this decision. I mean,
14 there is -- first of all, it's a way to not
15 do a separate intake of dose calculation for
16 12 radionuclides, many of which are
17 inconsequential, or it is the selection
18 process is supposed to provide not your best
19 estimate of the intake of the highest dose
20 radionuclide but, rather, an estimate that it
21 is sufficiently high that the dose that you
22 get is bounding for the suite of

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1 radionuclides to -- that is the intent, is to
2 -- rather than do all of these calculations,
3 do one that bounds them all.

4 Now, how well that has ever been
5 explained I don't know. And the basis for
6 choosing the value that was chosen I can't
7 explain very well.

8 But, as I recall, as I am sitting
9 here, I am reminded of all of these things I
10 should be doing for this Subcommittee.

11 CHAIRMAN GRIFFON: That's good.

12 MR. HINNEFELD: Yes, but, you see,
13 my only hope is I am telecommuting tomorrow
14 and nobody interrupts me too much. So I can
15 work on it tomorrow.

16 So I think that is what we owe to
17 kind of address this whole raft of issues.
18 And certainly it would be at least the
19 Savannah River issues I think the response
20 can be in the response. I think we may have
21 the same issue at Hanford. Maybe the Hanford
22 response will get it consistent. If it were

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1 the same response, I don't know if that is
2 going to be the case or not.

3 So this is an issue we know. And
4 this is defining issues that have been around
5 for a while.

6 MR. SIEBERT: Well, this ties into
7 the OTIB 54 for --

8 MR. HINNEFELD: Yes.

9 MR. SIEBERT: -- whole body
10 comparison because that is really what this
11 boils down to.

12 MR. HINNEFELD: Yes.

13 CHAIRMAN GRIFFON: So that was my
14 next question. Is this a Savannah River site
15 profile issue or is it a TIB 54?

16 MR. SIEBERT: Well, remember, TIB
17 54 didn't exist back at this time frame.

18 CHAIRMAN GRIFFON: I know it's
19 not, but I'm saying as far as the --

20 MR. SIEBERT: The resolution, yes.
21 It goes along with TIB 54. And the
22 assumption that we are coming up with is that

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1 we want to be able to demonstrate that if you
2 base it on OTIB 54 versus using chooser, 54
3 will be low. That's kind of what that
4 comparison is we're discussing for that
5 comparison.

6 MEMBER MUNN: But is it more
7 realistic?

8 CHAIRMAN GRIFFON: You had a
9 question?

10 MR. SIEBERT: Yes. Well --

11 CHAIRMAN GRIFFON: More realistic?

12 MR. HINNEFELD: Fifty-four we
13 believe to be, yes, more realistic than
14 chooser, right?

15 MR. SIEBERT: Yes.

16 MR. HINNEFELD: And so if 54 is,
17 in fact, lower than the chooser approach and
18 we're looking at what we're using now, then
19 we don't have to worry about these ones that
20 were done earlier with chooser approach.
21 That's the thought process.

22 MEMBER MUNN: Right.

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1 MS. BEHLING: And I guess I would
2 have to look a little bit deeper into OTIB 54
3 and, like I said, make a comparison.

4 MR. HINNEFELD: Yes, but I think
5 the action is really ours to put together a
6 coherent explanation on this.

7 MS. BEHLING: Okay.

8 MR. SIEBERT: And we've been
9 talking about this. And a lot of the other
10 radionuclides if you assigned what we do
11 assign would shine out like a bright, shining
12 light in the whole body count because their
13 detection limits tend to be lower. But it is
14 a comparison we have to do.

15 MS. BEHLING: Okay. Very good.

16 CHAIRMAN GRIFFON: Okay. Go
17 ahead, Doug. I'm sorry.

18 MR. FARVER: Another thing we have
19 is an observation about Super S plutonium.
20 Apparently it's been returned to be reworked.

21 MR. HINNEFELD: It is being --

22 MR. FARVER: And that was it for

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1 tab 152.

2 CHAIRMAN GRIFFON: Do you want to
3 take a five-minute break? Can anybody use a
4 five-minute break?

5 MR. HINNEFELD: That would be
6 good, I think, if we can --

7 CHAIRMAN GRIFFON: Yes. Let's
8 take five. Wanda, we are going to take about
9 five, maybe a ten-minute break.

10 MEMBER MUNN: Thank you.

11 CHAIRMAN GRIFFON: All right.
12 Thanks.

13 (Whereupon, the above-entitled
14 matter went off the record at 3:48
15 p.m. and resumed at 4:00 p.m.)

16 MR. KATZ: We are starting back up
17 the Dose Reconstruction Subcommittee review,
18 procedure 153. Is that what you said, Mark?

19 CHAIRMAN GRIFFON: Yes.

20 MR. KATZ: Wanda, are you back
21 with us?

22 MEMBER MUNN: I am.

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1 CHAIRMAN GRIFFON: Not procedure
2 153, but --

3 MR. KATZ: Right, right, right.

4 CHAIRMAN GRIFFON: -- case 153.

5 MR. KATZ: Case, case.

6 CHAIRMAN GRIFFON: And that's why
7 I think we are going to try to plug away for
8 another half-hour, maybe a little more,
9 Wanda. Then we'll call it a day because we
10 have made some good progress. Actually, I'm
11 losing people as we speak. They're dropping
12 like flies in the room here. So about a
13 half-hour, maybe 40 minutes. And then we'll
14 call it a day.

15 MEMBER MUNN: Never had the
16 experience, Mark.

17 MR. KATZ: You never had the
18 experience? Is that what you said?

19 MEMBER MUNN: Seeing people begin
20 to disappear at the end of the day.

21 CHAIRMAN GRIFFON: Oh, yes. I
22 know. I know. Right. So, Doug, I will turn

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1 it over to you to start 153.1.

2 MR. FARVER: Okay. 153.1. We
3 reported that the dose report does not
4 include a less than 30 keV proton dose for
5 year 1982.

6 This is another Savannah River
7 site. The employee was a laborer and worked
8 there from '51 through '82, so 30 years. And
9 doses were calculated for less than 30 keV
10 protons for the other years but not for 1982.
11 So we questioned, you know, why not 1982?

12 And NIOSH responded back that
13 according to TIB 6, having to do with
14 aluminum filtration, and a dosimeter was not
15 used after 1981, that you do not include
16 shallow dose unless it's a certain organ. It
17 would have an effect.

18 I guess that just brings up a
19 couple of questions. First, if you look at
20 the -- in 1982 -- and it was 221 FB line,
21 where the person worked. And the energy
22 distribution says 100 percent less than 30

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1 keV and 100 percent 30 to 250 keV, which made
2 us wonder why we didn't have the 1982 dose.

3 Now, I understand the TIB 6 and
4 the filtration. I guess what I was trying to
5 find real quick was the energy distribution
6 for 221 FB line. And I can't find it to say
7 that it's 100 percent 30 to 250 keV. That's
8 my concern at the moment.

9 MR. HINNEFELD: I can't remember.

10 MR. FARVER: And I want to make
11 sure I've got the right rev document.

12 CHAIRMAN GRIFFON: So 153.1 and .2
13 are --

14 MR. FARVER: Are the same?

15 CHAIRMAN GRIFFON: -- missed dose,
16 right? Yes.

17 MR. FARVER: I am looking at rev
18 1, page 99. And there's a table 5.3.4.1-1,
19 where it lists the beta and photon radiation
20 energies.

21 And I go down to 221 FB line. And
22 it says it should be 25 percent 30 keV and 75

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1 percent 30 to 250 keV, which means I should
2 still have a 30 keV dose.

3 Well, I don't know.

4 MR. HINNEFELD: Well, I am going
5 to have to learn more about this. I'm
6 looking at my response. Apparently the only
7 way the response makes sense is if you base a
8 30 keV before the -- well, the aluminum
9 filter must be over the entire dosimeter,
10 over the shallow or whatever.

11 MR. FARVER: Your response is
12 correct. That is what TIB 6 says.

13 MR. HINNEFELD: Okay. So if --

14 MR. FARVER: But it says if you
15 default to the distribution that's in the
16 technical basis. So then I went to the
17 technical basis to see what the distribution
18 was. And it says it's 25 percent 30 keV and
19 --

20 MR. HINNEFELD: Was there a
21 shallow reading or open window reading for
22 '82? And was that apportioned in some

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1 fashion?

2 MR. FARVER: Not that we could
3 find. I mean, there was a -- let's see.

4 MR. HINNEFELD: Well, there are
5 two possible explanations that come to mind
6 based on our response. One is that up
7 through 1981, there was an aluminum filter
8 over the badge. And so you could not count
9 on the shallow element to read a less than 30
10 keV photon. So it was inferred from the deep
11 reading.

12 The deep reading was not
13 considered to be based because of the 30 keV,
14 but it was due to the 30 to 250. But you
15 would have the similar quantity or whatever,
16 a ratio based on the ratios in the tables you
17 cited, that, in addition to generating the 30
18 to 250 number from the deep TLD, you would
19 also infer what the 30 keV would be based on
20 those ratios because the aluminum filter
21 would prevent the shallow dosimeter from
22 reading it.

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1 After '81, when the aluminum
2 filter was no longer there, a shallow
3 dosimeter would be capable of reading the
4 less than 30 keV photon. And so if there
5 were a less than 30 keV photon exposure, it
6 would be recorded accurately in the shallow
7 dose. And then that could be assigned either
8 as a shallow dose or as a beta dose because
9 they work out the same. You know, the
10 quality factors are the same. The risk
11 factors are the same.

12 So the less than 30 and a beta
13 particle, if either is recorded, I mean, if
14 there was a reading in the shallow window and
15 either one appears in dose reconstruction,
16 then that would be the shallow reading. And
17 then if there is no reading in the shallow,
18 then we are back to that whole thing about
19 missed doses and if you have a reading in
20 this and nothing in that, do you really have
21 a missed dose or not?

22 So that is the only way. I don't

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1 know if that is the case or not, but that is
2 the only way our response makes sense.

3 MR. FARVER: Yes. I was ready to
4 agree with your response until I went and
5 looked up the TBD and I saw that the
6 distribution was 25-75.

7 MR. HINNEFELD: But in that case,
8 though, if there is no aluminum filter, those
9 photos are less than 30 keV photons. I mean,
10 those are defaults.

11 I mean, you would always use what
12 the dosimeter tells you to use if they're
13 just going to be reading appropriately. And
14 you would use those energy ranges to
15 apportion your dose into the various IREP
16 bins.

17 But you would only use those
18 ratios to generate the dose number if, for
19 some reason, the dosimeter didn't provide you
20 the accurate dose number.

21 MR. FARVER: But according to TIB
22 6, the deep dose quantity during this period,

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1 which is for the period 1982 to present, the
2 guidance provided in the Savannah River
3 technical basis document should be used to
4 determine the photon energy distribution of
5 the deep dose; i.e., 25 percent less than 30
6 keV and 75 percent --

7 MR. HINNEFELD: Okay. So, then,
8 we'll come at the -- okay. Okay. Well, I
9 don't understand our response, then.

10 MR. FARVER: I just want to make
11 sure it's consistent.

12 CHAIRMAN GRIFFON: I think you
13 just have that as NIOSH to follow up on that,
14 right?

15 MR. HINNEFELD: Yes, yes.

16 CHAIRMAN GRIFFON: It was 153.1
17 and .2.

18 MR. HINNEFELD: Well, it would be
19 helpful for me to understand what was going
20 on.

21 CHAIRMAN GRIFFON: Yes.

22 MR. FARVER: And you can explain

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1 it to me so I can understand it so I don't do
2 this again.

3 MR. HINNEFELD: If I ever
4 understand it.

5 MR. FARVER: I thought I
6 understood it before I went to look it up.
7 And that will take care of 53.1 and 53.2.
8 153.3, 153.4, and 153.5 are the same
9 converted photon doses and missed doses and
10 neutron doses to organ doses with the dose
11 conversion factors in the workbook. And the
12 workbook has been corrected.

13 CHAIRMAN GRIFFON: Do you know if
14 this case is under PER review also?

15 MR. HINNEFELD: I suspect it is.
16 Almost everything at Savannah River came
17 back.

18 CHAIRMAN GRIFFON: Yes. You don't
19 have any way -- Scott has that listing?

20 MR. HINNEFELD: Well, Scott had --

21 CHAIRMAN GRIFFON: Yes, yes.

22 MR. HINNEFELD: I could probably

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1 find out. Oh, I know. You've got the
2 tracking numbers in your guys' report. I
3 think I --

4 CHAIRMAN GRIFFON: The only reason
5 I ask is because I have been putting that in
6 my resolution so that we can eventually go
7 back and look at all the PER, you know, if we
8 want to re-review any of the PER review cases
9 or rerun cases, whatever. It is getting
10 late.

11 So that brings us up to 153.6.
12 While Scott is checking on that number, we
13 can go ahead with that.

14 MR. FARVER: For some reason, I
15 left these two blank: 56.6 and .7. I am
16 going to have to check those.

17 CHAIRMAN GRIFFON: Maybe it's
18 because -- do you have the NIOSH response in
19 your matrix?

20 MR. FARVER: Yes, but I don't have
21 my response. And I don't know why.

22 CHAIRMAN GRIFFON: It's a recently

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1 inserted response. That's what I understand.

2 MR. FARVER: Okay.

3 CHAIRMAN GRIFFON: Okay.

4 MR. FARVER: I don't have a
5 response for those two to check those two
6 out.

7 CHAIRMAN GRIFFON: I'm just going
8 to put that as an SC&A will provide a
9 response.

10 MR. FARVER: Right.

11 CHAIRMAN GRIFFON: Okay.

12 MR. HINNEFELD: The claim you
13 talked about did get returned for the Super
14 S.

15 CHAIRMAN GRIFFON: Thanks.

16 MR. HINNEFELD: And it's not yet
17 approved. The new dose is not yet approved.

18 CHAIRMAN GRIFFON: Okay. So that
19 moves us down to -- that was 153.6 and .7,
20 right, Doug?

21 MR. FARVER: Yes.

22 CHAIRMAN GRIFFON: Okay. 153.8?

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1 MR. FARVER: This is fission
2 products, internal doses, which I believe
3 it's the same finding that we addressed in
4 the previous case.

5 CHAIRMAN GRIFFON: Yes. These are
6 both Savannah River. So we have --

7 MR. FARVER: Yes.

8 CHAIRMAN GRIFFON: Yes. Okay.
9 And then you have an observation?

10 MR. FARVER: Yes. It was -- we
11 just questioned on how you handle absorption
12 types for multiple organs. In other words,
13 type S might be more favorable for one organ.
14 And type F or M might be more favorable for
15 another one. But you really can't have both
16 of the same material. So how do you handle
17 that?

18 And they provided a very good
19 response basically saying if it's an
20 overestimate, you would do a separate organ
21 to determine the absorption type, but for a
22 best estimate, you kind of have to make the

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1 decision on which one has more impact on the
2 cancer.

3 CHAIRMAN GRIFFON: So this was a
4 multiple cancer?

5 MR. FARVER: Multiple cancer.

6 CHAIRMAN GRIFFON: Yes. Okay, and
7 you have observation number 2 as well.

8 MR. FARVER: Oh, this looks like
9 this is the Super S.

10 MR. HINNEFELD: Super S plutonium.
11 And it has been.

12 MR. FARVER: And it has been. And
13 that should take care of tab 153.

14 MR. HINNEFELD: Right. Moving on
15 to 154.

16 MR. FARVER: One fifty-four is
17 another Savannah River site case. The worker
18 was there from '51 through '66, had lung
19 cancer, a heavy equipment operator.

20 154.1 and 154.2.

21 CHAIRMAN GRIFFON: Same as before,
22 right? It looks like similar issues.

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1 MR. FARVER: I don't believe it is
2 the same.

3 MR. HINNEFELD: This is one you
4 agree with.

5 MR. FARVER: Oh, okay. It has to
6 do with the method to calculate less than 30
7 keV proton doses.

8 CHAIRMAN GRIFFON: And NIOSH
9 agrees, yes.

10 MR. FARVER: The way they were
11 calculated, we didn't believe they were
12 calculated appropriately. They only give an
13 example of what we believe the calculation
14 should be. And I guess they agree it was
15 incorrectly calculated.

16 The only thing I can respond to
17 that is how do you prevent that from
18 happening again. Was it a workbook error or
19 was it a person error?

20 MR. HINNEFELD: I'll have to find
21 out.

22 MR. FARVER: And that's the same

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1 for 154.1 and 154.2.

2 CHAIRMAN GRIFFON: Let me catch up
3 to you, Doug. Just one second.

4 MR. FARVER: Sure.

5 CHAIRMAN GRIFFON: Okay. It's the
6 same for 154.2 and .3, you said? No?

7 MR. FARVER: 154.1 and --

8 CHAIRMAN GRIFFON: And .2.

9 MEMBER MUNN: Yes.

10 CHAIRMAN GRIFFON: Right. Go
11 ahead.

12 MR. FARVER: Okay. 154.3 is the
13 intake --

14 MEMBER MUNN: I didn't hear what
15 we were going to do with 1 and 2, .1 and .2.
16 It was agreed in my mind that these had all
17 been closed, but I heard the question asked
18 about why.

19 CHAIRMAN GRIFFON: Right. I have
20 --

21 MEMBER MUNN: And I didn't hear an
22 answer.

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1 CHAIRMAN GRIFFON: Yes. NIOSH is
2 going to review to determine the nature of
3 the error and then, you know, the question of
4 how can we prevent it going forward. So we
5 need to know sort of what was it, just a
6 mistake by the DR. Was it a work --

7 MEMBER MUNN: Right, right. Got
8 it. Just did not hear any response.

9 CHAIRMAN GRIFFON: Sorry. Yes.
10 We're getting a little quiet here.

11 MEMBER MUNN: All right. Thanks.

12 CHAIRMAN GRIFFON: All right.

13 MR. FARVER: Okay. 154.3. We are
14 really just pointing out that the intake date
15 that they used for their calculations is not
16 the same date that's in the DR report. It
17 lists a date of 1965 when it is really 1964,
18 just more of a review-type error. Maybe that
19 should have been caught.

20 CHAIRMAN GRIFFON: You are saying
21 there was a typo in the report but not in the
22 IMBA analysis, right? Is that?

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1 MR. FARVER: Correct.

2 CHAIRMAN GRIFFON: Yes, yes.

3 MR. FARVER: The correct dates
4 were used in the analysis, but the --

5 CHAIRMAN GRIFFON: So the number
6 calculated was correct?

7 MR. FARVER: Yes.

8 CHAIRMAN GRIFFON: So NIOSH agrees
9 with that, right?

10 MR. HINNEFELD: Yes.

11 CHAIRMAN GRIFFON: There is no
12 further action in my opinion. Okay? So that
13 is closed, Wanda. Are we loud enough still?

14 MEMBER MUNN: I got it.

15 CHAIRMAN GRIFFON: Keep us awake.

16 MR. HINNEFELD: It's not quite
17 2:00 o'clock out there.

18 CHAIRMAN GRIFFON: Yes.

19 MEMBER MUNN: Yes. But I just had
20 a ten-minute lunch.

21 MR. FARVER: 154.4, failure to
22 account for unmonitored tritium doses. What

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1 is a quick way to explain this? Basically we
2 believe they forgot the year 1957 because the
3 employee was monitored for external dose.
4 And he falls under the criteria that is in
5 the technical basis that they should have
6 been assessed a tritium dose because they
7 monitored for external dose in that year. Is
8 that correct, Stu?

9 MR. HINNEFELD: Well, for whatever
10 reason, we agreed with the finding.

11 CHAIRMAN GRIFFON: Okay.

12 MR. HINNEFELD: A monitored
13 tritium should have been included for 57
14 according to our response.

15 MR. FARVER: And dose-wise it's
16 not a big concern. It's just a concern, and
17 it slipped through.

18 MR. HINNEFELD: Yes.

19 CHAIRMAN GRIFFON: I will ask the
20 same question I asked for the last case. Is
21 this under PER review? I would probably
22 assume. We might as well check, though,

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1 while we're doing this if that's okay.

2 MR. HINNEFELD: Okay.

3 CHAIRMAN GRIFFON: So NIOSH agrees
4 with this. And no effect on the case,
5 though, is what we're hearing, right?

6 MR. FARVER: It would not impact
7 the --

8 CHAIRMAN GRIFFON: What was the
9 POC on this?

10 MR. FARVER: The low 40s. Let me
11 get back to it. Forty-six.

12 CHAIRMAN GRIFFON: I hate to
13 hastily write this no effect on the case
14 without checking that.

15 MR. FARVER: Yes.

16 CHAIRMAN GRIFFON: The other thing
17 is that it is under review anyway under the
18 PER. So it is going to be reworked most
19 likely. That is why I wanted to find out.

20 MR. FARVER: It probably will --

21 CHAIRMAN GRIFFON: Yes.

22 MR. FARVER: -- because that's one

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1 of our next observations for the Super S.
2 But before we go there, we have 154.5, which
3 is a failure to account for all unmonitored
4 fission product doses. And we have seen
5 these points before.

6 Oh, no. This is a little
7 different. This goes back to that same
8 segment where the TBD, section 4.4.3, workers
9 monitored for external dose but had no
10 bioassay for each year of assumed exposure
11 period assign an annual dose from missed
12 tritium.

13 Annual missed dose is equal to
14 tritium doses and entered into the IREP has
15 less than 15 keV to account for fission
16 products. And then it accounts for fission
17 product based on that little segment, section
18 4.4.3. So that is where that finding comes
19 from.

20 CHAIRMAN GRIFFON: I lost you a
21 little bit here.

22 MR. FARVER: Okay.

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1 CHAIRMAN GRIFFON: Okay. I see
2 NIOSH's response. It says, see 154.5-D2A.
3 Should it be .4? Do you see where I am at?

4 MR. FARVER: Yes.

5 CHAIRMAN GRIFFON: That should be
6 .4, right?

7 MEMBER MUNN: Yes.

8 MR. HINNEFELD: Yes, yes, yes.

9 CHAIRMAN GRIFFON: Okay.

10 MR. FARVER: Does NIOSH agree that
11 they should have fission products or not --

12 MR. HINNEFELD: Yes.

13 MR. FARVER: -- or just the
14 environmental fission products?

15 MR. HINNEFELD: No. I think if it
16 gives the same, that makes it clearly must
17 refer back to the .4. And this is both of
18 those, both the unmonitored tritium and the
19 unmonitored fission products, are essentially
20 in the same variables, right?

21 MR. FARVER: Yes.

22 MR. HINNEFELD: The same reason

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1 we'll put them in.

2 MR. FARVER: Yes.

3 MR. HINNEFELD: And they were both
4 left out. So yes.

5 MR. FARVER: Okay.

6 MR. HINNEFELD: And this case was
7 returned for --

8 CHAIRMAN GRIFFON: Okay.

9 MR. FARVER: Yes, which is an
10 observation, insoluble plutonium.

11 CHAIRMAN GRIFFON: Okay. Oh, yes.
12 I see it in the next one. That brings us up
13 to 155.

14 MR. FARVER: One fifty-five.

15 CHAIRMAN GRIFFON: Try one more.
16 Yes, let's try one more. What the heck?

17 MR. FARVER: Okay. And another
18 Savannah River case.

19 CHAIRMAN GRIFFON: Another
20 Savannah River. I was hoping for a little
21 variety.

22 MR. FARVER: No.

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1 CHAIRMAN GRIFFON: That's all
2 right.

3 MR. HINNEFELD: Hey, blame them.
4 They sort them together.

5 CHAIRMAN GRIFFON: Yes. I know.
6 I was thinking it probably is another
7 Savannah River.

8 MR. FARVER: I think he took the
9 blame for that one. Okay. The employee
10 worked there from 1978 to [Identifying Information
11 Redacted], had renal
12 cell carcinoma and leukemia. This was a [Identifying
13 Information Redacted].

14 Okay. The first finding is 155.1.
15 NIOSH did not properly account for all missed
16 proton doses from -- I'm not sure of a good
17 way to explain this, although no response
18 gives a good explanation.

19 There are two parts. The first
20 part had to do with the results that were
21 less than half of the dosimeter limit. Okay.
22 In the dosimetry record, there were 143

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1 zeros, zero entries.

2 And the first part of it was there
3 were some entries in there that were less
4 than the LOD over 2.

5 So that was the first part of
6 their response, heard five times. And it was
7 handled according to how it should have been
8 handled at that time.

9 MR. HINNEFELD: Guidance at that
10 time.

11 MR. FARVER: At that time. The
12 second part has to do with the zero entries.
13 There were 143 zero entries. Plus, there
14 were also three-quarters of the recorded data
15 for '92 and also for 1995. So you have to
16 add in some extra quarters, two extra
17 quarters, to account for missed dose.

18 And that was not done. And that's
19 what they say in the second part of their
20 response, that they agree with that, and we
21 can concur with their response, agree.

22 CHAIRMAN GRIFFON: Can you check

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1 this one, too, Stu? It's in PER review or
2 whether it is.

3 MR. HINNEFELD: It was returned.

4 CHAIRMAN GRIFFON: So in the
5 second half, I got the first step of that.
6 NIOSH agrees with the second part. Is that
7 what I'm hearing?

8 MR. HINNEFELD: Yes.

9 CHAIRMAN GRIFFON: That it
10 wouldn't impact the case significantly. Is
11 that --

12 MR. HINNEFELD: I don't think so,
13 but it has been reworked anyway.

14 CHAIRMAN GRIFFON: Reworked,
15 right. Okay.

16 MR. HINNEFELD: This one and the
17 one before at least have been approved by
18 NIOSH after the PER. The reworked one has
19 been approved by NIOSH. But I don't know if
20 it's final or adjudicated.

21 CHAIRMAN GRIFFON: Yes. Go ahead,
22 Doug. I'm sorry.

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1 MR. FARVER: 155.2, we have a
2 concern about the work location that was
3 assigned for 1985. And this falls under
4 neutron doses, I believe, yes. We're talking
5 about neutron doses.

6 NIOSH assigned the measure to
7 missed neutron dose for 221H in 1984 and 221F
8 in 1985. When we looked at the records, we
9 saw the dosimeter location's area 3F for 1984
10 and again in area 3F in 1985. Therefore, we
11 thought the assignments for '84 and '85
12 should have been both been for F area,
13 instead of the H and F in '85.

14 This goes back just to the tricky
15 part. I'm just trying to figure out where
16 the person worked. And NIOSH presents their
17 reasoning that -- we'll see what this person
18 did. The person is a pipefitter. So he
19 would fall under construction most likely.
20 And construction could be anywhere. Most
21 likely their dosimeter is one-to-one
22 location.

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1 They presented a response. I will
2 have to look at it and see if it will impact
3 the dose. Probably not because it is for a
4 single year. I can't say that their
5 reasoning is any better than our reasoning.

6 CHAIRMAN GRIFFON: Right.

7 MR. FARVER: So I don't know how
8 we close that out other than saying that we
9 understand what they did. And it is kind of
10 a subjective call. And for this case, it's
11 not important POC-wise.

12 CHAIRMAN GRIFFON: Right. What is
13 the POC for this?

14 MR. FARVER: Thirty-two percent,
15 something like that.

16 MEMBER MUNN: Can we say response
17 acceptable, close?

18 CHAIRMAN GRIFFON: Yes, especially
19 since it is being reviewed anyway.

20 MR. FARVER: Yes.

21 CHAIRMAN GRIFFON: So yes. I say,
22 SC&A understands what NIOSH did and believes

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1 it is a subjective call. No further action
2 for this case.

3 MEMBER MUNN: Good.

4 CHAIRMAN GRIFFON: -- which is
5 under PER review.

6 MR. FARVER: I only wanted to
7 point it out because I can't guarantee that
8 won't come up in another case, --

9 CHAIRMAN GRIFFON: I know. Right.

10 MR. FARVER: -- where we have a
11 little difference of opinion about the
12 records, designation of the records.

13 CHAIRMAN GRIFFON: Right. Okay.

14 MR. FARVER: 155.3, we did not
15 include all missed neutron dose periods. We
16 both agree there were 20 zero entries. But
17 we looked closely at the DOE records, and we
18 saw zeros in the neutron column for eight
19 additional entries. So it should be 28
20 zeros, instead of 20, not much impact on the
21 dose.

22 MR. HINNEFELD: In our response,

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1 we agreed to the finding.

2 CHAIRMAN GRIFFON: No further
3 action. Okay. 155.4?

4 MR. FARVER: 155.4, NIOSH used
5 one-half bioassay data, instead of one-half
6 in the MDA values. Okay. Typically what you
7 would do -- this is for the internal dose
8 calculation -- is you use one-half the MDA
9 values when it's less than MDA. And, near as
10 I can tell, they used one-half the bioassay
11 value.

12 MR. HINNEFELD: Well, response
13 would indicate that the --

14 CHAIRMAN GRIFFON: Yes.

15 MR. HINNEFELD: -- it's a less
16 than reported value in the bioassay record,
17 --

18 MR. FARVER: Okay.

19 MR. HINNEFELD: -- which is a
20 standard specific MDA or critical level or
21 MDA, I guess, versus the --

22 CHAIRMAN GRIFFON: Site profile.

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1 MR. HINNEFELD: -- site profile,
2 which is sort of a generic that you use when
3 you don't have site-specific --

4 MR. FARVER: So they reported the
5 MDA?

6 MR. HINNEFELD: Yes.

7 MR. FARVER: Okay. I went back
8 and checked the records. And that's true. I
9 agree with your result. It just wasn't clear
10 to the reviewer because I don't believe the
11 dosimetry records actually state that that is
12 an MDA value.

13 MR. HINNEFELD: Yes. It's not
14 well-explained. We agreed with that.

15 MR. FARVER: I don't know if you
16 want to slip a little statement in your TBD
17 about if the records contain MDA values, you
18 use one-half of the value given in the
19 dosimetry records, the bioassay records.

20 MR. HINNEFELD: I'll make a note.

21 CHAIRMAN GRIFFON: Where would
22 this change occur, or what is being proposed?

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1 MR. HINNEFELD: Well, dose
2 proposal is where we would consider in the
3 TBDs where we list these. It's like tables
4 of, you know --

5 CHAIRMAN GRIFFON: You have --

6 MR. HINNEFELD: If you've got
7 table-specific MDAs, use those instead, you
8 know something like that.

9 CHAIRMAN GRIFFON: So, then, NIOSH
10 is considering that?

11 MR. HINNEFELD: Yes. I'd say we
12 will consider that.

13 CHAIRMAN GRIFFON: Right.

14 MR. HINNEFELD: I don't know what
15 people will tell.

16 CHAIRMAN GRIFFON: I have an idea.

17 MR. HINNEFELD: It could be a lot
18 of changes, a lot of document changes for
19 something that we are already doing anyway.

20 CHAIRMAN GRIFFON: Right, right,
21 exactly. Okay. Are we on the 155.5?

22 MR. FARVER: 155.5, SC&A could not

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1 verify NIOSH's bioassay value. This is for
2 strontium. We just couldn't figure out how
3 they came up with the value they used for
4 their calculation. And we give an example of
5 a calculation we think it should be based on
6 the bioassay results from the employee.

7 And so we just finally concluded
8 we don't know how they did it. And then
9 NIOSH's response is -- and it's an order of
10 magnitude high.

11 CHAIRMAN GRIFFON: So it was a
12 claimant-favorable error, right, basically?

13 MR. FARVER: Correct.

14 MEMBER MUNN: Response accepted?

15 I don't --

16 CHAIRMAN GRIFFON: Yes. It's
17 under PER review anyway. So it doesn't
18 matter.

19 MR. FARVER: Response accepted.

20 MR. HINNEFELD: Is 155.6 the same
21 as 155.4?

22 MR. FARVER: Correct. 155.6 is

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1 the same as 155.4, I believe, about the
2 one-half bioassay data, instead of the
3 one-half MDA, only this time it's for
4 strontium.

5 CHAIRMAN GRIFFON: 155.6 you said
6 is the same as the 155.4?

7 MR. FARVER: Correct.

8 CHAIRMAN GRIFFON: The MDA
9 question? Okay.

10 MR. HINNEFELD: Yes. This is
11 strontium.

12 CHAIRMAN GRIFFON: Yes. Got you.

13 MR. HINNEFELD: I think it was
14 plutonium, something else.

15 CHAIRMAN GRIFFON: So that's the
16 same action. All right. Go ahead.

17 MR. FARVER: 155.7, failure to
18 account for all internal doses from fission
19 products. Now, that one I believe is the
20 same as our previous ones. And I know we
21 decided on those.

22 CHAIRMAN GRIFFON: I know. Give

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1 me a number, and I can --

2 MR. HINNEFELD: 152.6 I think is
3 where it appears.

4 MR. FARVER: Correct, 152.6.

5 CHAIRMAN GRIFFON: We said there
6 will be further adjustment. Profile
7 document, NIOSH will compare the model used:
8 the chooser approach or the OTIB 54 approach.

9 MR. HINNEFELD: Yes. We have just
10 neglected to put together --

11 MR. FARVER: Yes.

12 MR. HINNEFELD: -- our
13 comprehensive explanation of why we think
14 that is okay.

15 CHAIRMAN GRIFFON: What number
16 were we just on?

17 MR. HINNEFELD: .7.

18 CHAIRMAN GRIFFON: 155.7?

19 MR. HINNEFELD: Yes.

20 CHAIRMAN GRIFFON: Okay. 155.8.
21 We're coming toward the end here, guys.

22 MR. FARVER: 155.8. NIOSH failed

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1 to assign the environmental tritium dose.
2 They did assign cesium, strontium, plutonium.
3 And, therefore, tritium should have been
4 assigned during unmonitored years '78, '82,
5 '84 to '88, and '94 to '95. And there were a
6 couple of years where tritium doses, we
7 acknowledge, were less than one millirem. So
8 they would not get included.

9 MR. HINNEFELD: We agreed with the
10 findings.

11 CHAIRMAN GRIFFON: NIOSH agrees.
12 No further action on that. And then the
13 observations?

14 MR. FARVER: Okay.

15 CHAIRMAN GRIFFON: By definition,
16 I'm thinking the observation does not require
17 any actions.

18 MR. FARVER: No.

19 CHAIRMAN GRIFFON: Right. But
20 let's go through them, nonetheless. I mean,
21 I --

22 MR. FARVER: The first observation

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1 was there was an inconsistency in DOE
2 records. And let me switch documents real
3 quick, and I'll try and find that. The copy
4 I was looking at is a draft. And it does not
5 have those observations in it.

6 CHAIRMAN GRIFFON: So your
7 response to NIOSH's response sort of suggests
8 that you don't disagree that there are
9 inconsistencies, but you take the higher
10 value one there?

11 MR. HINNEFELD: Yes. The response
12 and the description of the observation are
13 apparently for the year 1989 -- there is a
14 discrepancy between some of the different
15 records in a claim file between HPAREH and
16 HPRED and SLHP3 database. So that seems to
17 be what the other --

18 CHAIRMAN GRIFFON: Yes.

19 MR. HINNEFELD: There are two or
20 three different instances of it. And our
21 response is, yes, we know that. We used a
22 higher one each time. We have to go back and

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1 verify the facts that happen, and you want to
2 have them verify that that actually was done.

3 CHAIRMAN GRIFFON: Well, I am
4 assuming --

5 MR. HINNEFELD: Yes.

6 CHAIRMAN GRIFFON: Like I said,
7 since it is an observation, I don't think it
8 requires an action. But it's more for our
9 information, right, overall?

10 MR. HINNEFELD: Yes.

11 CHAIRMAN GRIFFON: Yes. It might
12 be an issue with the Savannah River review of
13 the SEC. We're going to get into the
14 databases and --

15 MR. HINNEFELD: Right.

16 CHAIRMAN GRIFFON: Their
17 consistency, I'm sure we'll dive into that a
18 little more there.

19 MR. HINNEFELD: Observation 2 is
20 the Super S plutonium.

21 CHAIRMAN GRIFFON: We've already
22 got that. Okay. I think that brings us to a

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1 close since we're all getting very quiet --

2 MR. HINNEFELD: Yes.

3 CHAIRMAN GRIFFON: -- on the
4 microphone. And I've kind of had enough. I
5 don't know about you guys.

6 MR. HINNEFELD: Observation 3 had
7 to do with the medical --

8 CHAIRMAN GRIFFON: Oh, there's
9 observation 3? I'm sorry. I didn't see --

10 MR. HINNEFELD: Well, it has to do
11 with only the X-ray exams performed as part
12 of routine monitoring were included in dose,
13 which is the approach that's done. If it's a
14 person who has to get an X-ray because of a
15 possible broken leg or something, we don't
16 include those in dose reconstruction.

17 CHAIRMAN GRIFFON: All right.
18 Sorry. I totally missed observation 3.

19 MR. HINNEFELD: That's okay.

20 CHAIRMAN GRIFFON: That's at the
21 end of the page.

22 MR. HINNEFELD: I want to go --

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1 MEMBER MUNN: One more page here.

2 MR. HINNEFELD: Okay.

3 CHAIRMAN GRIFFON: All right. I
4 think we are about cooked in this one.

5 MEMBER MUNN: You know the 64 is
6 not bad. There are only 50 pages left.

7 CHAIRMAN GRIFFON: You are just
8 getting started, right, Wanda?

9 MEMBER MUNN: Yes, right. Now is
10 the time to really get going.

11 CHAIRMAN GRIFFON: You didn't
12 thank us, but you are welcome for your
13 wake-up call this morning.

14 (Laughter.)

15 MEMBER MUNN: Yes. I appreciate
16 your having done it. I have no idea how that
17 escaped my calendar. It's not on either of
18 my calendars.

19 CHAIRMAN GRIFFON: I don't know.

20 MEMBER MUNN: I am astonished in
21 that I wasn't prepared to be online. Sorry
22 about that.

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1 CHAIRMAN GRIFFON: That's all
2 right.

3 MR. KATZ: It was kind of nice,
4 Wanda. You're a little bit feisty first
5 thing.

6 MEMBER MUNN: Well, let me tell
7 you, being hauled out to what? What do you
8 mean it's a Subcommittee meeting? Good
9 grief. That's all right. I'm just glad it
10 isn't video, guys.

11 (Laughter.)

12 CHAIRMAN GRIFFON: Well, we
13 appreciate you being online.

14 MEMBER MUNN: Thanks.

15 CHAIRMAN GRIFFON: All right. And
16 thanks to everyone today. I think we made
17 some good headway, believe it or not.

18 MR. KATZ: Thanks to everyone for
19 all the hard work.

20 CHAIRMAN GRIFFON: It's a long
21 day.

22 MR. KATZ: Yes.

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1 CHAIRMAN GRIFFON: But we made
2 some good headway, yes. And I think we will
3 close it out unless there are any final
4 thoughts by our DFO.

5 MR. KATZ: No. We are adjourned.
6 Thank you, everyone on the phone, for hanging
7 in there.

8 CHAIRMAN GRIFFON: Thanks a lot,
9 everyone.

10 (Whereupon, the above-entitled
11 matter was concluded at 4:47 p.m.)

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